

# JVC

## SERVICE MANUAL

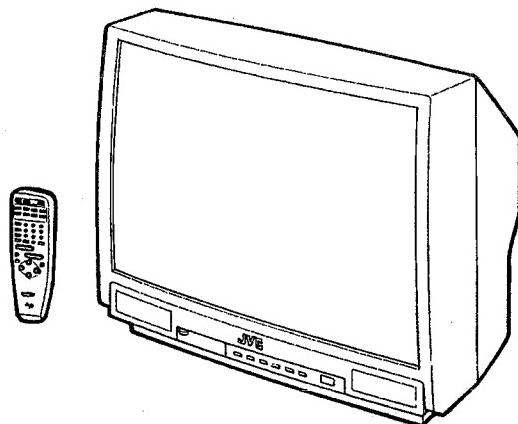
### COLOR TELEVISION

**AV-36850**<sub>(US&CA)</sub>

**AV-36870**<sub>(US&CA)</sub>

BASIC CHASSIS

FK



[AV-36870]

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# SPECIFICATIONS

Item	Contents	
	AV-36850(US&CA)	AV-36870(US&CA)
Dimensions ( W × H × D )	860mm × 765mm × 603mm 33-7/8" × 30-1/8" × 23-3/4"	860mm × 765mm × 603mm 33-7/8" × 30-1/8" × 23-3/4"
Mass	67.8 kg 149.5 lbs	68.0 kg 149.9 lbs
Reception Format	NTSC, BTSC System ( Multi Channel Sound )	
Reception Range (Receiving Channels and Frequency)	VL Band (02 ~ 06) 54MHz ~ 88MHz VH Band (07 ~ 13) 174MHz ~ 216MHz UHF Band (14 ~ 69) 470MHz ~ 806MHz	
CATV Channels and Frequency	Low Band (02 ~ 06, A-8) by (02 ~ 06 & 01) High Band (07 ~ 13) by (07 ~ 13) Mid Band (A ~ I) by (14 ~ 22) Super Band (J ~ W) by (23 ~ 36) Hyper Band (W + 1 ~ W + 28) by (37 ~ 64) Ultra Band (W + 29 ~ W + 84) by (65 ~ 125) Sub Mid Band (A8, A1 ~ A4) by (01, 96 ~ 99)	
Closed Caption System	C1, C2, F1, F2 Available	
Intermediate Frequency	Video IF Carrier 45.75MHz Sound IF Carrier 41.25MHz (4.5MHz) Color Sub Carrier 3.58MHz	
Power Input	120V AC, 60Hz	
Power Consumption	135W ( US ) / 1.8A ( CA )	
Picture Tube		
Screen Size	36inch / 90cm , measured diagonally, Full square	36inch / 89cm , measured diagonally, Full square
High Voltage	31kV ± 1.3kV ( at zero beam current )	
Surround System	Build in HYPER SURROUND system	
Audio Power Output	3W + 3W	
External Input ( 1, 2 )	Front AV-IN terminal is bridged with INPUT 2.	
Video Input	1Vp-p, 75Ω	
Audio Input	500mVrms ( -4dBs ), High impedance	
S-Video Input	Y : 1Vp-p positive, 75Ω ( Negative sync provided ) C : 0.286Vp-p ( burst signal ), 75Ω	
Audio Output	Variable : More than 0 to 1550mVrms (+6dBs) / Fix : 500mVrms (-4dBs) Low impedance ( 400 Hz when modulated 100% )	
AV Compu Link Ex	3.5mm mini jack × 2	
Speakers	3-3/16" × 4-3/4", 8cm × 12cm Oval Type × 2	
Antenna Input Impedance	75Ω ( VHF/UHF ) Terminal, F-Type Connector	
Remote Control Unit	RM-C745-1C	RM-C885-1A

Design & specification subject to change without notice

# SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by () on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**  
The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED(NEUTRAL) side ground or EARTH side ground when repairing.**  
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (#) side GND, the ISOLATED(NEUTRAL) : (V) side GND and EARTH : (E) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.  
If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a  $10k\Omega$  2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

## 10. Isolation Check

### (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

#### (1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

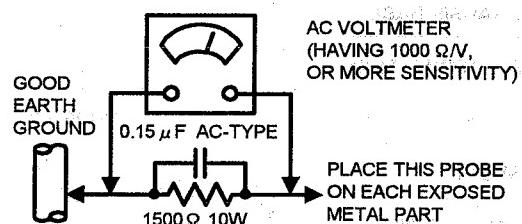
This method of test requires a test equipment not generally found in the service trade.

#### (2) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

#### ● Alternate Check Method

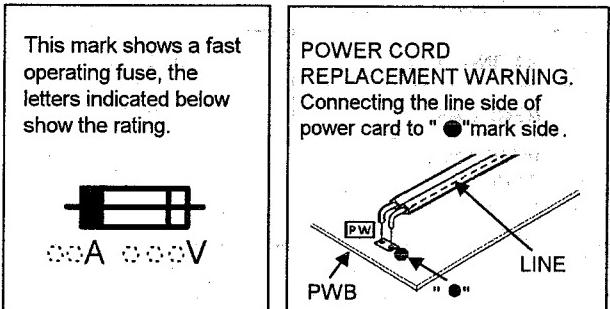
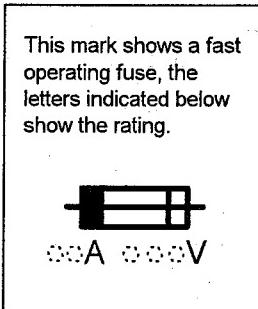
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a  $1500\Omega$  10W resistor paralleled by a  $0.15\mu F$  AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).



## 11. High voltage hold down circuit check.

After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.

See item "How to check the high voltage hold down circuit".



## FEATURES

- New chassis design enables use of single board with simplified circuitry.
- Comb filter improved picture quality.
- Provided with 2 tuner ( TV/CATV, PIP ).
- Full-square CRT reproduces fine textured picture in every detail.
- PLL synthesizer system for channel tuning.
- AV COMPU LINK EX terminals allow simultaneous mode switching of the TV, connected receiver ( or amplifier ) and / or VCR.
- TELETEXT broadcast can be viewed.
- With AUDIO, VIDEO input terminal.

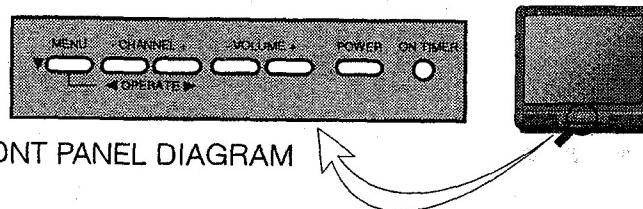
- By the sound multiplex broadcast with MTS system, you can enjoy music programs and sporting events with live realism.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Variable audio output terminal.
- I<sup>2</sup>C bus control utilities single chip ICs.
- By selecting the THEATER STATUS picture, you can enjoy pictures with powerful effects.
- The HYPER-SURROUND system makes a reproduction of the acoustic effects in a theater with strong appeal.

## MAIN DIFFERENCE LIST BETWEEN AV-36850 AND AV-36870

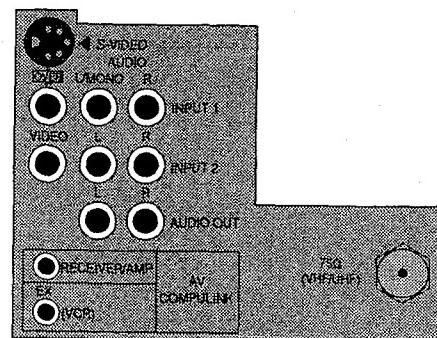
⚠ Model Name	AV-36850		AV-36870	
	(US)	(CA)	(US)	(CA)
MAIN PWB	SFK-1006A-M2		SFK-1007A-M2	
AV SEL. PWB	SFK-8004A-M2		SFK-8001A-M2	
FRONT AV JACK PWB	—		SFK0J002A-M2	
PICTURE TUBE	A90AEJ15X01		A90AEX15X01	
CONTROL BASE	—		CM22670-001-A	
CHASSIS BASE	CM12689-B01-VA		CM12416-E01-VA	
F. CABINET ASSY	CM12747-00F-MA		CM12747-00G-MA	
DOOR	CM36162-006-A		CM36162-005-A	
SHEET	—		CM48272-001-A	
TAP. SCREW	—		SDSB3010M	
REMOTE CONTROL	RM-C745-1C		RM-C885-1A	
INST BOOK (ENGLISH)	CQ40343-001-A	←	CQ40334-001-A	←
INST BOOK (FRNCH)	—	CQ40344-001-A	—	CQ40335-001-A
RATING LABEL	CM23034-001-A	CM22999-001-A	CM23034-001-A	CM22999-001-A
REGI. CARD	BT-51006-1Q	—	BT-51006-1Q	—
WARRANTY CARD	—	BT-52002-1Q	—	BT-52002-1Q
SVC CENTER LIST	—	BT-20071B-Q	—	BT-20071B-Q

# FUNCTIONS [AV-36850]

## FRONT AND REAR PANEL DIAGRAMS



FRONT PANEL DIAGRAM



REAR PANEL DIAGRAM

## REMOTE CONTROLS

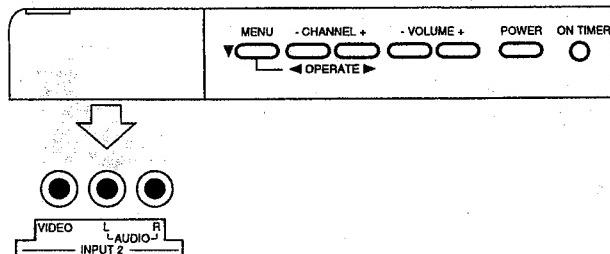
RM-C745



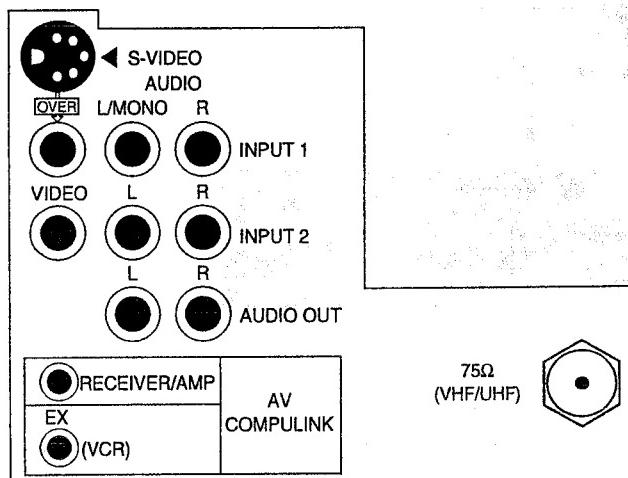
# FUNCTIONS

[AV-36870]

## FRONT AND REAR PANEL DIAGRAMS



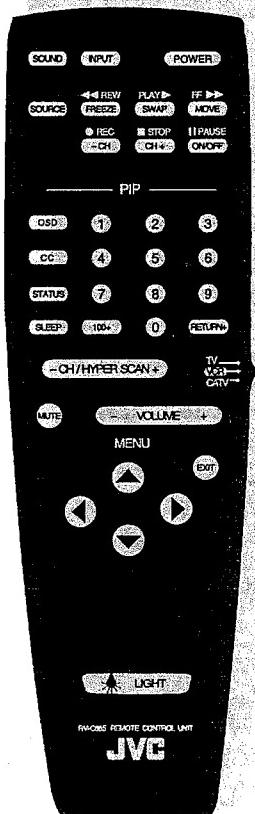
FRONT PANEL DIAGRAM



REAR PANEL DIAGRAM

## REMOTE CONTROL

RM-C885



# SPECIFIC SERVICE INSTRUCTIONS

## DISASSEMBLY PROCEDURE

### REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 11 screws marked A as shown in Fig.2.
3. Remove the rear cover toward you.

When reinstalling the rear cover, carefully push it inward after inserting the chassis into the rear cover groove.

### REMOVING THE FRONT AV JACK PW BOARD

[Only for AV-36870(U&C)]

- After removing the rear cover.

Remove the screw marked C as shown in Fig.2.

### REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the chassis from the front cabinet.
2. Draw the chassis backward along the rail in the arrow direction marked B as shown in the Fig.2.  
(If necessary, take off the wire clamp, connectors etc.)

When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

### REMOVING THE AV TERMINAL BOARD

- After removing the rear cover.

1. Remove the 2 screws marked D as shown in Fig.2.
2. After removing the claw marked E in the direction of arrow mark as shown in Fig.1.
3. When you pull out the AV TERMINAL BOARD in the direction of arrow marked F as shown in Fig.1, it can be removed.  
At that time, the connector of the ANTENNA SPLITTER and the TUNER comes out.
4. Thus the connector should be securely inserted when the AV TERMINAL BOARD is installed again.

### REMOVING THE FRONT CONTROL PW BOARD

- After removing the rear cover and chassis.

[For AV-36870(U&C)]

1. Lift up the FRONT CONTROL PWB with control base, and raise the claws in the arrow direction marked G as shown in Fig.3.
2. Pick up the PWB upward in the arrow direction marked H, then removed.

[For AV-36850(U&C)]

1. Remove the 2 screws.
2. Then remove the FRONT CONTROL PWB.

### CHECKING THE MAIN PW BOARD

To check the back side of the MAIN PW Board.

- 1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
- 2) Erect the chassis vertically so that you can easily check the back side of the MAIN PW Board.

#### [CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PWB.
- Before turning on power, make sure that the wire connector, CRT earth wire and other connectors properly connected.

### WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together.  
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

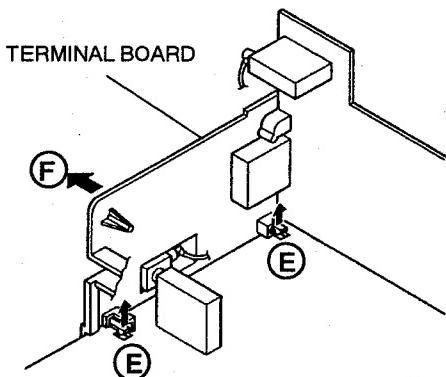


Fig. 1

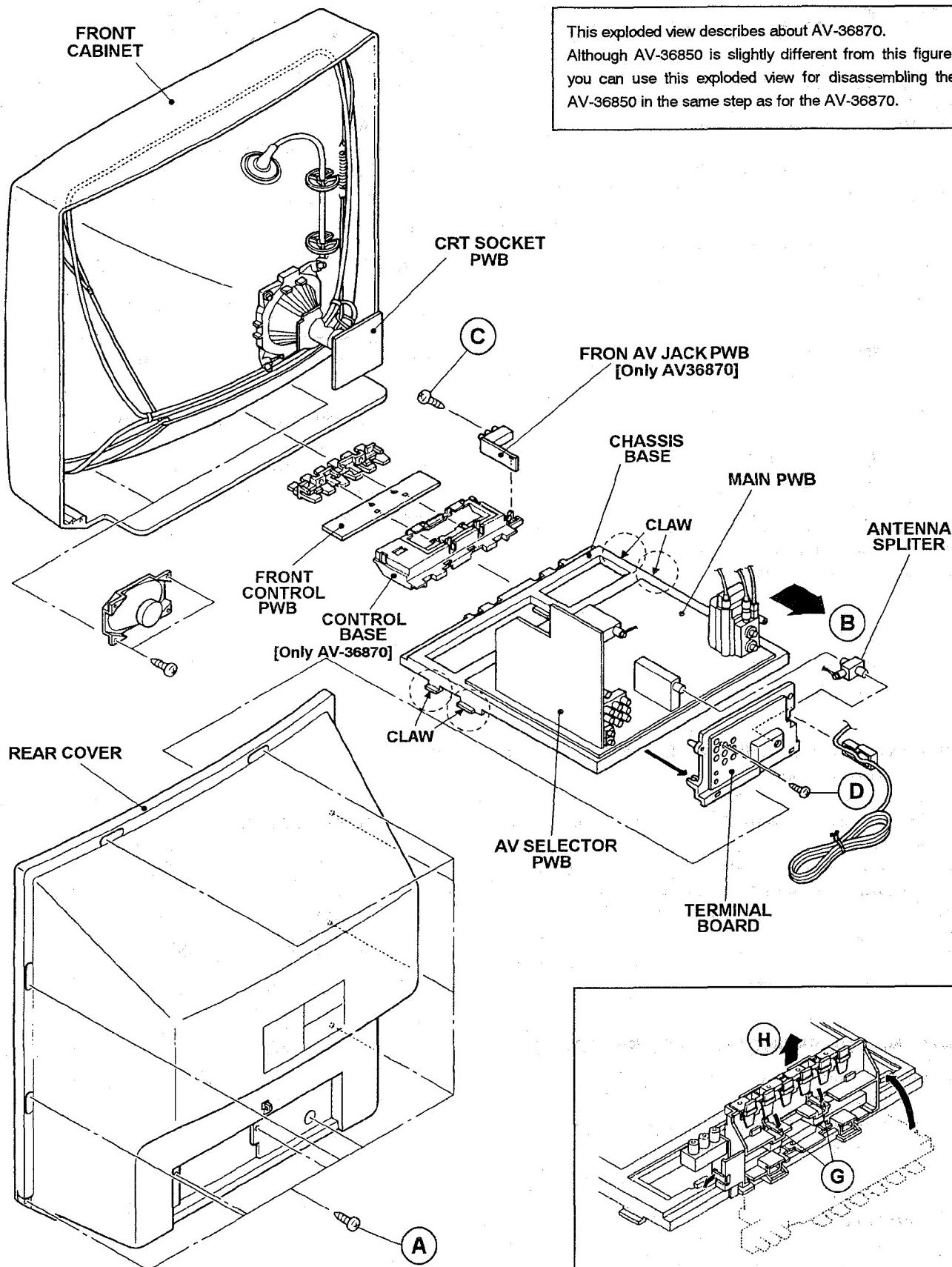


Fig. 2

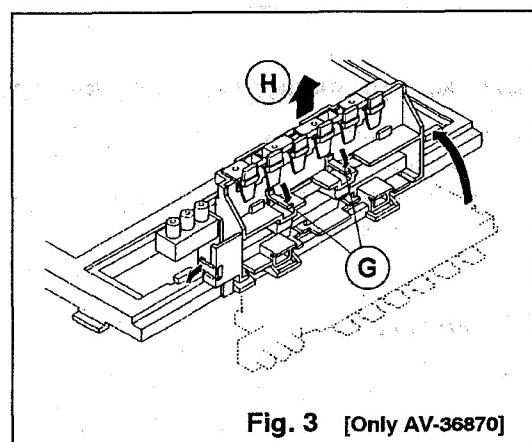


Fig. 3 [Only AV-36870]

## REMOVING THE CRT

- \* Replacement of the CRT should be performed by 2 or more persons.
- After removing the cover, chassis etc.,
- 1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).
- 2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.4.
- 3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.4.
- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.
- 4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.
- The CRT should be assembled according to the opposite sequence of its dismantling steps.
- \* The CRT change table should preferably be smaller than the CRT surface, and its height be about 35cm.

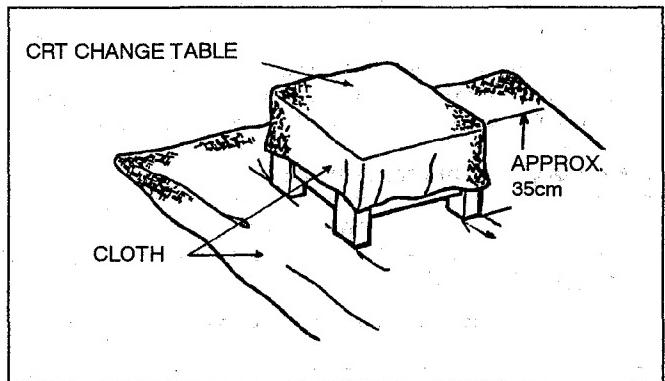


Fig. 3

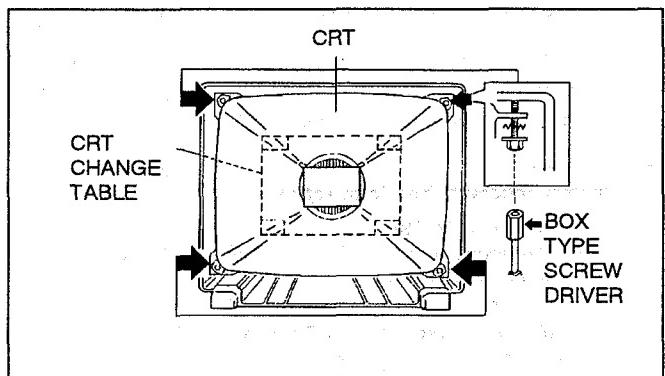


Fig. 4

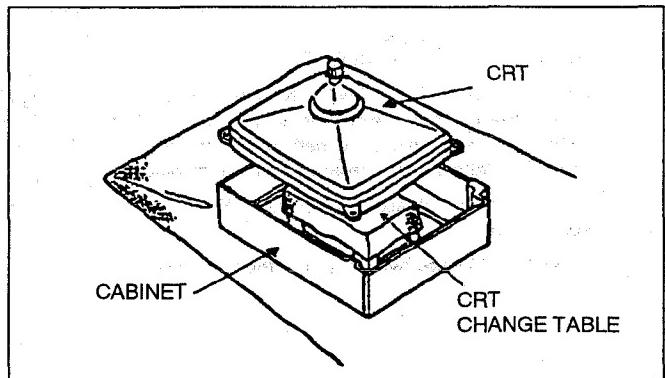


Fig. 5

## COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismantling them, be sure to coat silicon grease for electrical insulation as shown in Fig.6.
- Wipe around the anode button with clean and dry cloth. (Fig.6)
- Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not stick to the anode button. (Fig.7)

★ Silicon grease product No. KS - 650N

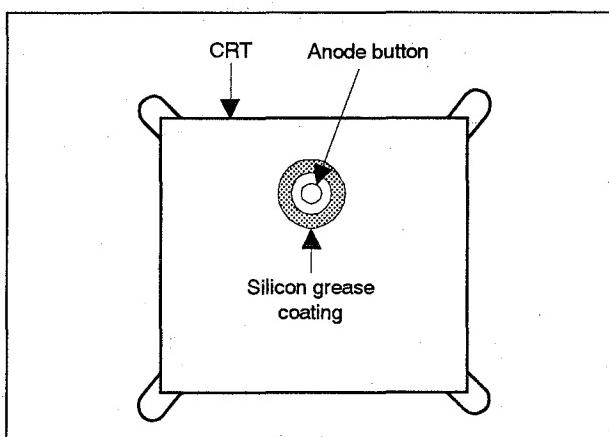


Fig. 6

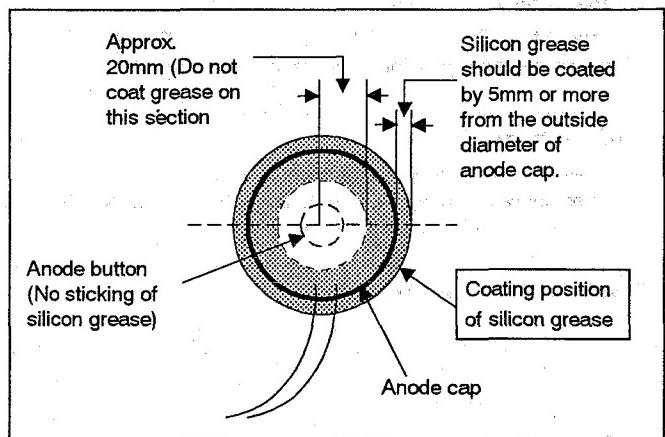


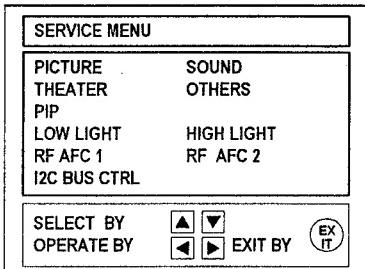
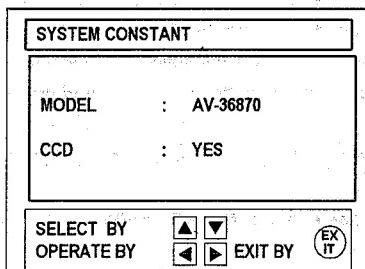
Fig. 7

## MEMORY IC REPLACEMENT

### 1. Memory IC

This model uses a memory (EEP-ROM) IC.  
The memory IC stores data for proper operation of video and deflection circuits.  
When replacing, be sure to use an IC containing this (initial value) data.

### 2. Memory IC replacement procedure

PROCEDURE	SCREEN DISPLAY
<b>(1) Power off</b> Switch off the power and disconnect the power cord from the outlet.	
<b>(2) Replace the memory IC.</b> Be sure to use memory ICs written with the initial data values.	
<b>(3) Power on</b> Connect the power cord to the outlet and switch on the power.	
<b>(4) System constant check and setting</b> <ul style="list-style-type: none"> <li>1) [ AV-36870 : RM-C885 ] Simultaneously press the DISPLAY key and VIDEO STATUS key of the remote control unit. [ AV-36850 : RM-C745 ] Simultaneously press the OSD key and STATUS key of the remote control unit. [AV-36850 : RM-C745]</li> <li>2) The SERVICE MENU screen of Fig.1 is displayed.</li> <li>3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY (OSD) and VIDEO STATUS (STATUS) keys to display the Fig.2 SYSTEM CONSTANT screen.</li> <li>4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP / DOWN key and adjust the setting with the MENU LEFT / RIGHT keys. (The letters of the selected item are displayed in yellow.)</li> <li>5) After adjusting, release the MENU LEFT / RIGHT key to store the setting value.</li> <li>6) Press the EXIT key twice to return to the normal screen.</li> </ul>	 <p>Fig.1</p>
<b>(5) Receive channel setting</b> Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.	 <p>Fig.2</p>
<b>(6) User settings</b> Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.	
<b>(7) SERVICE MENU setting</b> Verify what to set in the SERVICE MENU, and set whatever is necessary. (Fig.1) refer to the SERVISE ADJUSTMENT for setting.	

[ The figures are about the model AV-36870 ]

TABLE 1 (System Constant setting)

Setting item	Setting constant	Setting value
MODEL	➔ AV-27850 ➔ AV-27870 ➔ AV-32820 ➔ AV-32850 ➔ AV-32870 ➔ AV-36850 ➔ AV-36870 ➔ SEARS 32V	AV-36870 : [AV-36870] AV-36850 : [AV-36850]
CCD	➔ YES ➔ NO	YES

TABLE 2 (User setting)

Setting item	Setting value	Setting item	Setting value
<b>1. Use remote controller keys</b>			
POWER CHANNEL VOLUME TV/VIDEO CLOSED CAPTION	OFF CH-02 Proper sound volume TV OFF(CC1/T1) : [AV-36850] OFF(CC1/T1/BLACK) : [AV-36870]	DISPLAY VIDEO STATUS SLEEP TIMER PIP SOURCE PIP POSITION	OFF STANDARD 00 CH-04 Lower left
HYPER SURROUND	OFF		
<b>2. Settings from MENU</b>			
TINT COLOR PICTURE BRIGHT DETAIL	CENTER	TV SPEAKER	ON
	CENTER	AUDIO OUT	FIX
	CENTER	LANGUAGE	ENG
	CENTER	CLOSED CAPTION	CAPTION : CC1
NOTCH	OFF		TEXT : T1
NOISE MUTE	ON		BACKGROUND : BLACK
SET VIDEO STATUS	ALL CENTER	AUTO TUNER SET UP	[AV-36870]
BASS	CENTER	CHANNEL SUMMARY	OTHERS
TREBLE	CENTER		
BALANCE	CENTER		Set optionally
MTS	STEREO	TUNER MODE	Stations 02 - CBS
SET CLOCK	Unnecessary to set		04 - NBC
ON/OFF TIMER	NO		07 - ABC
SET LOCK CODE	Unnecessary to set		AIR

# SERVICE ADJUSTMENTS

## ADJUSTMENT PREPARATION:

1. You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment equipment and parts as before.
2. Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
3. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
4. Make sure that AC power is turned on correctly.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment-variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.

Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

VIDEO STATUS	STANDARD
NOTCH	OFF
HYPER SURROUND	OFF
BASS, TREBLE, BALANCE	CENTER

## ADJUSTMENT EQUIPMENT

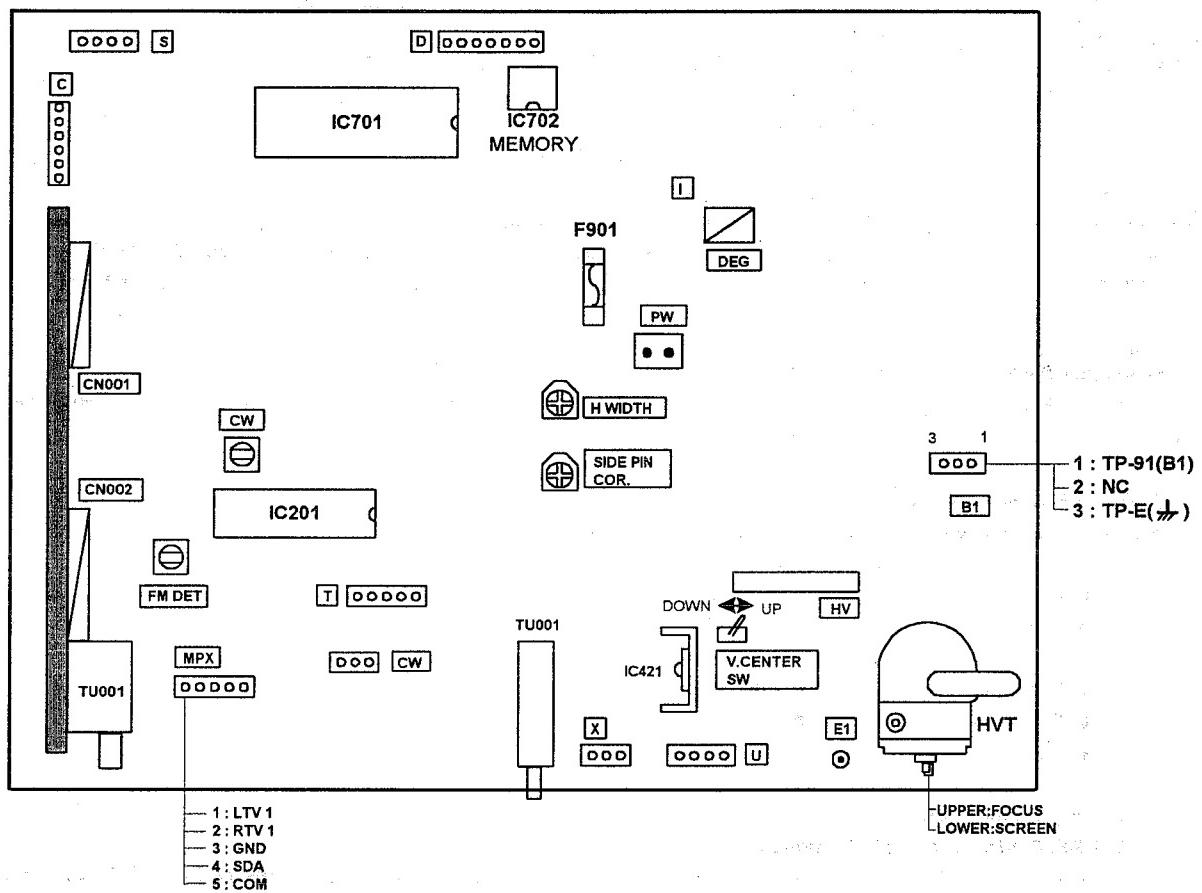
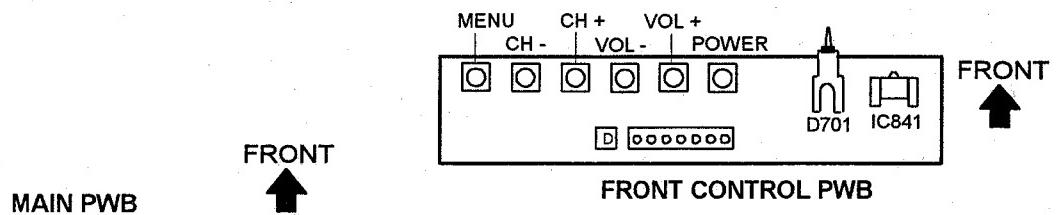
1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator ( Pattern generator ) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter

## ADJUSTMENT ITEMS

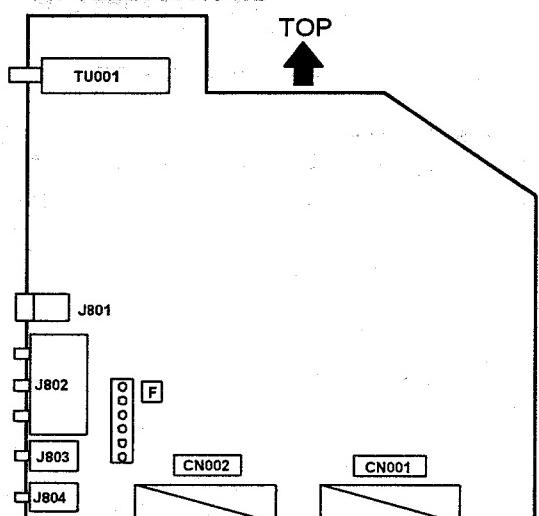
- B1 Voltage check
- IF VCO adjustment
- RF AGC adjustment
- FOCUS adjustment
- DEFLECTION adjustment
  - V. CENTER, V. SIZE, V. POSITION adjustment
  - H. WIDTH, SIDEPIN CORRECT, H. POSITION adjustment
- VIDEO / CHROMA adjustment
  - WHITE BALANCE ( Low light ) adjustment
  - WHITE BALANCE ( High light ) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment

- PIP circuit adjustment
  - RF AGC ( Noise ) adjustment
  - DISPLAY POSITION adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
- MTS circuit adjustment
  - INPUT LEVEL adjustment
  - STEREO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment
- PURITY, CONVERGENCE adjustment

## ADJUSTMENT LOCATONS

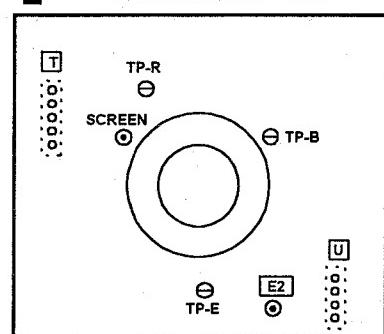


AV SELECTOR PWB



FRONT AV JACK PWB  
[AV-36870]

CRT SOCKET PWB



## BASIC OPERATION OF SERVICE MENU

### 1. Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

#### 2. In general, 10 basic setting(adjustments) items or verifications are performed in the SERVICE MENU.

- (1) PICTURE ..... This sets the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
- (2) SOUND ..... This sets the setting values (adjustment values) of the AUDIO circuit.
- (3) THEATER ..... This is used when the THEATER MODE is adjusted.
- (4) OTHERS ..... This sets the setting values (adjustment values) of the OTHERS circuit.
- (5) PIP ..... This sets the setting values (adjustment values) of the PICTURE-IN-PICTURE circuit.  
(PIP is means as Picture In Picture)
- (6) LOW LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- (7) HIGH LIGHT ..... This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- (8) RF AFC 1 ..... This is used when the IF VCO is adjusted.
- (9) RF AFC 2 ..... This is used when the IF VCO is adjusted of the PIP. [Do not adjust about this item]
- (10) I<sup>2</sup>C BUS CTRL ..... This is used when ON/OFF of the I<sup>2</sup>C BUS CTRL is set. [Do not adjust about this item]

### 3. Basic Operations of the SERVICE MENU

#### (1) How to enter the SERVICE MENU.

Press the DISPLAY (OSD) key and VIDEO STATUS (STATUS) key of the remote control unit at the same time to enter the SERVICE MENU screen ① shown in figure page later.

#### (2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.

(The letters of the selected items are displayed in yellow.)

- PICTURE
- SOUND
- THEATER
- OTHERS
- PIP
- LOW LIGHT
- HIGH LIGHT
- RF AFC 1
- RF AFC 2
- I<sup>2</sup>C BUS CTRL

#### (3) Enter the any setting ( adjustment ) mode

##### ● PICTURE, SOUND and OTHERS mode

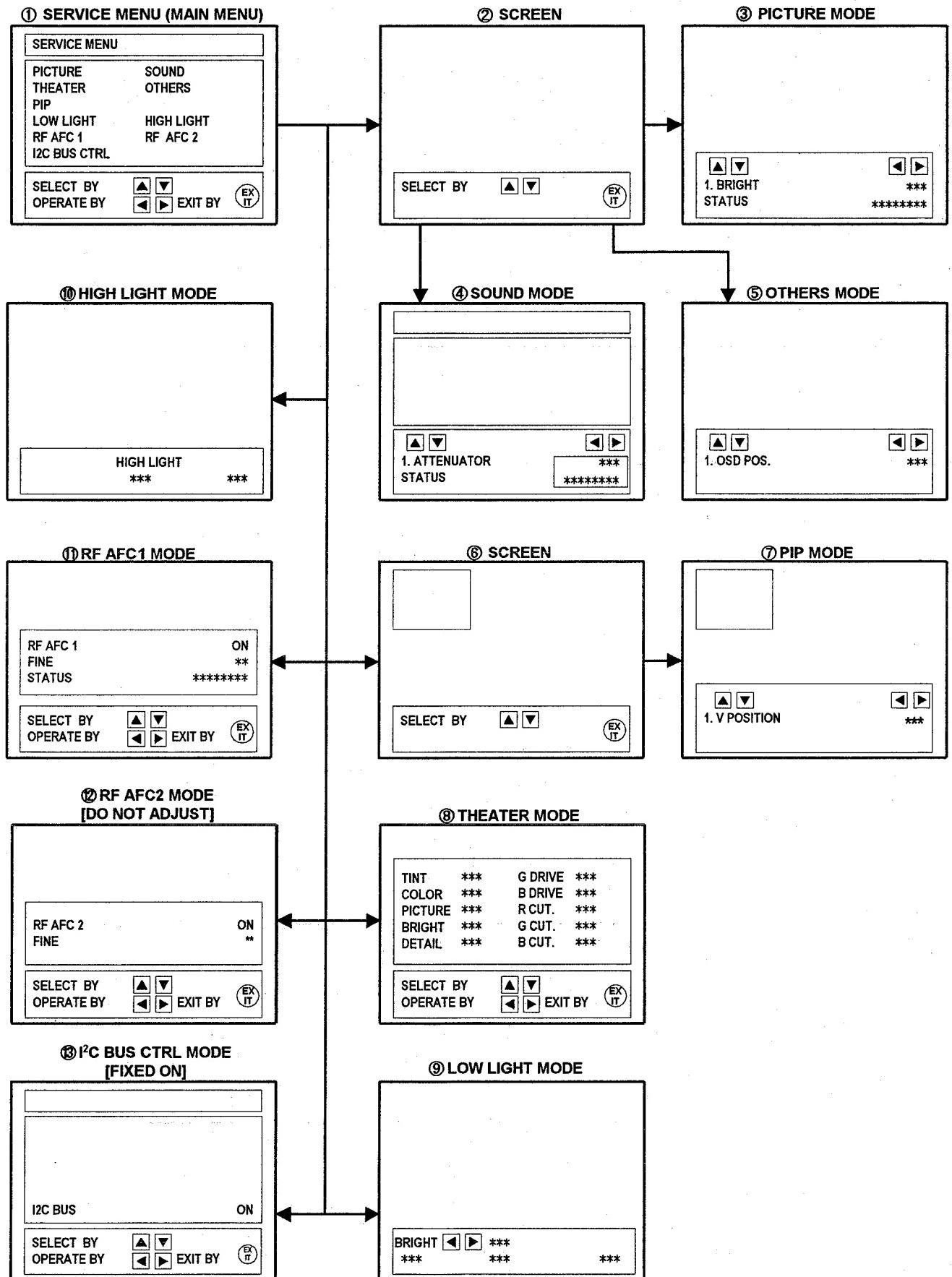
- 1) If select any of PICTURE, SOUND or OTHERS items, and the LEFT / RIGHT key is pressed from SERVICE MENU ( MAIN MENU ), the screen ② will be displayed as shown in figure page later.
- 2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHERS mode screen ⑤ is displayed, and the PICTURE, SOUND or OTHERS setting can be performed.

##### ● PIP mode

- 1) If select the PIP item, and the LEFT / RIGHT key is pressed from SERVICE MENU ( MAIN MENU ), the screen ⑥ will be displayed as shown in figure page later.
- 2) Then UP / DOWN key is pressed, the PIP mode screen ⑦ is displayed, and the PIP setting can be performed.

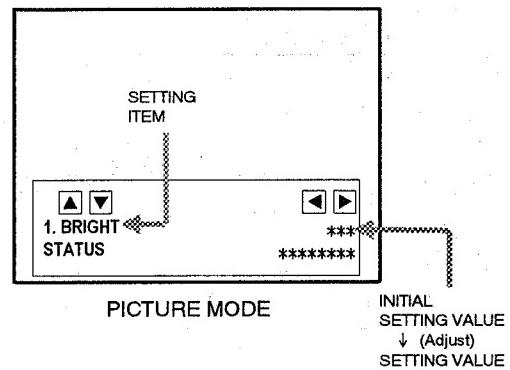
##### ● THEATER, LOW LIGHT, HIGH LIGHT, RF AFC1, RF AFC2 and I<sup>2</sup>C BUS CTRL mode

- 1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC 1 / RF AFC 2 / I<sup>2</sup>C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU ( MAIN MENU ), the screens ⑧⑨⑩⑪⑫⑬ will be displayed as shown in figure page later.
- 2) Then the settings or verifications can be performed.



**(3) Setting method**

- 1) UP / DOWN key of the MENU  
Select the item.
- 2) LEFT / RIGHT key of the MENU  
Setting(adjust) the value of the items.  
When the key is released the setting value will be stored (memorized).
- 3) EXIT key  
Returns to the previous screen.

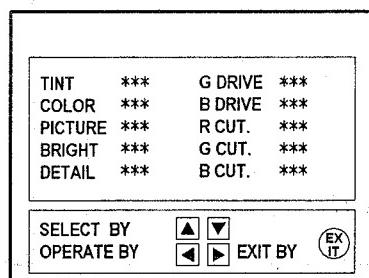
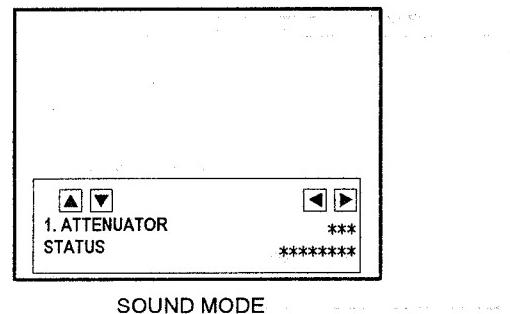


**(4) Releasing SERVICE MENU**

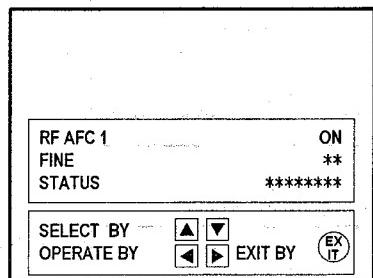
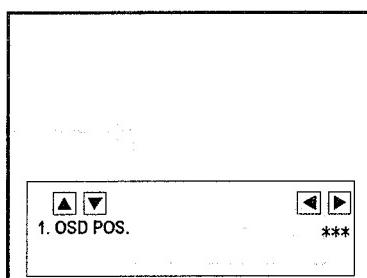
- 1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.

★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.

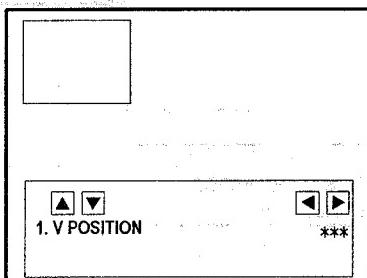
★ The setting for RF AFC 1 are described in the IF VCO page of ADJUSTMENT.



THEATER MODE



RF AFC 1 MODE



## INITIAL SETTING VALUE OF SERVICE MENU

1. Adjustment of the SERVICE MENU is made on the basis of the initial setting values ; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
2. Do not change the initial Setting Values of the Setting (Adjustment) items not listed in "ADJUSTMENT".

### ● PICTURE MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-36850	AV-36870
1.	BRIGHT	0~127	64	64
2.	PICTURE	0~127	75	75
3.	WPS (WHITE PEAK SUPPRESSOR)	0 / 1	1	1
4.	TV DETAIL	0~63	38	38
5.	TV BPF (TV B.P.FILTER)	0 / 1	1	1
6.	TINT	0~127	64	64
7.	COLOR	0~127	52	52
8.	EXT BRIGHT	±25	-1	-1
9.	EXT PICT.	±25	0	0
10.	EXT DETAIL	0~63	38	38
11.	EXT BPF (EXT B.P.FILTER)	0 / 1	1	1
12.	EXT TINT	±25	+8	+8
13.	EXT COLOR	±25	+3	+3
14.	V SIZE	0~63	30	30
15.	V CENTER	0~7	0	0
16.	H POSITION	0~31	22	22
17.	H AFC	0 / 1	0	0
18.	BLANKING	0 / 1	0	0
19.	RF AGC	0~63	35	35
20.	PIF VCO	0~127	64	64

### ● SOUND MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	ATTENUATOR	0~63	50
2.	BALANCE	0~63	32
3.	NOISE DET.	0 / 1	1
4.	IN LEVEL (INPUT LEVEL)	0~63	25
5.	FH MONITOR	0 / 1	0
6.	STEREO VCC	0~63	23
7.	PILOT CAN. (PILOT CANCELER)	0 / 1	0
8.	FILTER	0~63	30
9.	LOW SEP. (LOW SEPARATION)	0~63	35
10.	HI SEP. (HI SEPARATION)	0~63	17
11.	5FH MON. (5FH MONITOR)	0 / 1	0
12.	SAP VCO	0~63	28
13.	IN GAIN (INPUT GAIN)	0 / 1	0
14.	FIL OFFSET	0~10	0

### ● THEATER MODE

Setting (Adjustment) item	Variable range	Initial setting value
TINT	±20	±00
COLOR	±20	-2
PICTURE	±20	-15
BRIGHT	±20	±00
DETAIL	±15	-3
G DRIVE	-80~+50	-25
B DRIVE	-80~+50	-72
R CUT. (R CUTOFF)	±10	±00
G CUT (G CUTOFF)	±10	±00
B CUT (B CUTOFF)	±10	±00

● OTHERS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-36850	AV-36870
1.	OSD POS.	0 ~ 7	0	
2.	CCD POS. (CLOSED CAPTION DECODER POS.)	0 ~ 15	5	
3.	EOSEL	0 / 1	1	
4.	F1-FIELD	0 / 1	1	
5.	F1-LINE21	0 ~ 15	8	
6.	F2-LINE21	0 ~ 15	8	
7.	OSD STABI	1 / 0	0	
8.	LOCK DET.	1 / 0	0	
9.	COL. NOISE	1 / 0	0	
10.	MENU COLOR	-30 ~ 0	-10	
11.	MENU PICT	-30 ~ 0	-12	
12.	MENU BRI	-30 ~ 0	-12	

● PIP MODE [For AV-32850, AV-32870]

No.	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-36850	AV-36870
1.	V POSITION	0 ~ 127	25	
2.	LOWER POS.	0 ~ 255	123	
3.	H POSITION	0 ~ 63	9	
4.	RIGHT POS.	0 ~ 127	93	
5.	TINT	0 ~ 63	45	
6.	COLOR SAT	0 ~ 127	50	
7.	CONTRAST	0 ~ 127	50	
8.	BRIGHT	0 ~ 31	20	
9.	FRAME Y	0 ~ 15	8	
10.	FRAME BY	0 ~ 7	4	
11.	FRAME RY	0 ~ 7	4	
12.	H AREA	0 ~ 63	23	
13.	V AREA	0 ~ 63	41	
14.	Y/C DELAY	0 ~ 15	5	
15.	EXT MH SEL	0 ~ 3	0	
16.	EXT MV SEL	0 ~ 1	0	
17.	EXT SYNC SEL	0 ~ 3	3	
18.	HP	0 ~ 3	0	
19.	AD CLOCKSEL	0 ~ 3	0	
20.	KILLER	0 ~ 1	1	
21.	TEST-ACC-L	0 / 1	0	
22.	ALL-LEVEL	0 ~ 63	21	
23.	AFFOFF	0 / 1	0	
24.	ADJ	0 ~ 15	5	
25.	ASPECT H	0 ~ 63	54	
26.	HT	0 ~ 15	7	
27.	ASPECT V	0 ~ 255	67	
28.	TEST-PIP-C	0 / 1	0	
29.	BGPMSEL	0 / 1	0	
30.	BPFSEL	0 ~ 3	0	
31.	LPFSEL	0 ~ 3	2	
32.	MODE	0 ~ 3	1	
33.	BG-START	0 ~ 63	14	
34.	DOUTSEL	0 ~ 3	0	
35.	EXT BH SEL	0 ~ 3	3	
36.	SEL-PD-OUT	0 ~ 1	0	

## ● LOW LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value	
		AV-36850	AV-36870
R CUTOFF	0 ~ 255	20	
G CUTOFF	0 ~ 255	20	
B CUTOFF	0 ~ 255	20	

## ● HIGH LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value	
		AV-36850	AV-36870
G DRIVE	0 ~ 255	128	
B DRIVE	0 ~ 255	128	

## ● RF AFC 1 MODE

Setting (Adjustment) item	Variable range	Initial setting value	
		AV-36850	AV-36870
RF AFC 1 FINE	ON / OFF -77 ~ +77	ON ±00	

## ● RF AFC 2 MODE [ For AV-32850, AV-32870 ]

Setting (Adjustment) item	Variable range	Initial setting value	
		AV-36850	AV-36870
RF AFC 2 FINE	ON/OFF -77 ~ +77	Do not adjust	

● I<sup>2</sup>C BUS CTRL MODE

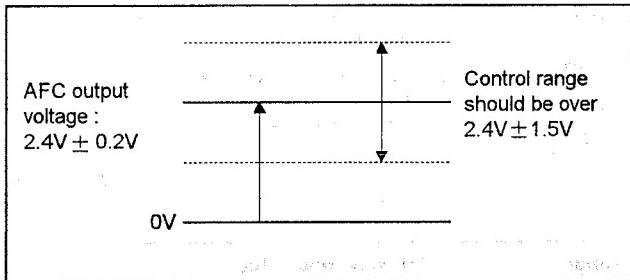
Setting (Adjustment) item	Variable range	Initial setting value
I <sup>2</sup> C BUS	ON/OFF	Fixed on

## ■ ADJUSTMENTS

### B1 VOLTAGE CHECK

Item	Measuring instrument	Test point	Adjustment item	Description
B1 Voltage check	DC Voltmeter	B1 (B1 Connector [1 pin] (TP-91)) TP-E( ) (B1 Connector [3 pin])		<ol style="list-style-type: none"> <li>Input a black and white signal (color off).</li> <li>Connect the DC voltmeter to B1 connector [1 pin] (TP-91) and TP-E( ) (B1 connector [3 pin]).</li> <li>Confirm that the voltage is DC134V±2V.</li> </ol>

### ADJUSTMENT OF IF VCO

Item	Measuring instrument	Test point	Adjustment item	Description
IF VCO adjustment	Oscilloscope Signal generator	CW Connector [3 pin]	CW TRANSF. [RF AFC 1] mode	<ol style="list-style-type: none"> <li>Input the color bar signal.</li> <li>Connect the oscilloscope to pin [3] of the CW connector.</li> <li>Select the [RF AFC 1] mode of the SERVICE MENU, and set the RF AFC1 to OFF and FINE to ±00.</li> <li>Turn CW TRANSF., verify that the AFC output voltage changes quickly between 2.4V ±1.5V and then adjust the voltage to 2.4V ±0.2V.</li> <li>Return the RF AFC to ON.</li> <li>Cancel the SERVICE MENU and check that no irregularities are displayed on the screen. If there any irregularities, select [RF AFC 1] mode on the SERVICE MENU and verify that FINE is 00 when the AFC is ON. Repeat steps 3 to 5 if necessary.</li> </ol> 

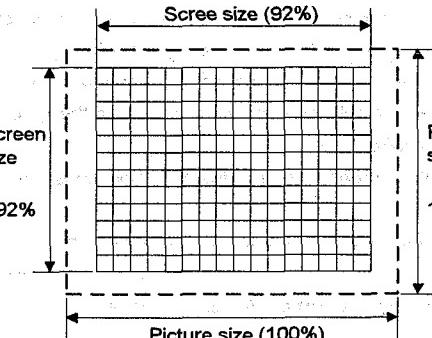
### ADJUSTMENT OF RF AGC

RF AGC adjustment			No.19 RF AGC	<ol style="list-style-type: none"> <li>Receive a broadcast.</li> <li>Select "No.19 RF AGC" of the PICTURE mode in SERVICE MENU.</li> <li>Press the MUTE key and turn off color.</li> <li>With the MENU LEFT key, get noise in the screen picture. (0 side of setting value)</li> <li>Press the MENU RIGHT key and stop when noise disappears from the screen.</li> <li>Change to other channels and make sure that there is no irregularity.</li> <li>Press the MUTE key and get color out.</li> </ol>
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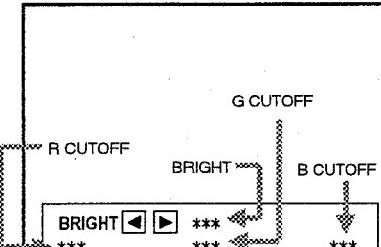
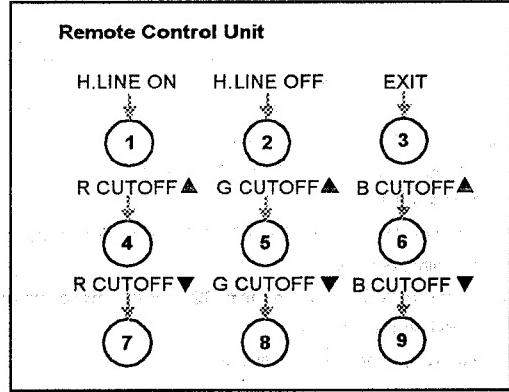
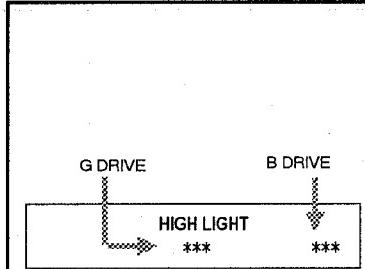
### ADJUSTMENT OF FOCUS

FOCUS adjustment	Signal generator		FOCUS VR [In HVT]	<ol style="list-style-type: none"> <li>Input a crosshatch signal.</li> <li>While looking at the screen, adjust FOCUS VR so that the vertical and horizontal lines will be clear and in fine detail.</li> <li>Make sure that the picture is in focus even when the screen gets darkened.</li> </ol>
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## ADJUSTMENT OF DEFLECTION CIRCUIT

Item	Measuring instrument	Test point	Adjustment item	Description
V.CENTER V.SIZE and V.POSITION adjustment	Signal generator		No.14 V SIZE  No.15 V CENTER  V.CENTER SW	<p>1. Input a crosshatch signal.      2. Confirm the "No.15 V CENTER" of the PICTURE mode is 0.      3. Adjust the vertical SCREEN size to 92% with the "No.14 V SIZE" and V.CENTER SW.</p> 
H.WIDTH, SIDEPIN CORRECT and H.POSITION adjustment	Signal generator		No.16 H POSITION  SIDEPIN CORRECT VR  H.WIDTH VR	<p>1. Input a crosshatch signal.      2. Adjust the SIDEPIN CORRECT VR so that the vertical lines at both side of the crosshatch are straight.      3. Select the "No.16 H POSITION" of the PICTURE mode in SERVICE MENU.      4. Adjust the "No.16 H POSITION" until the screen will be horizontally centered.      5. Adjust the H.WIDTH VR so that 92% of the overall crosshatch is displayed on the screen.      6. As required above steps 2 and 5.</p>

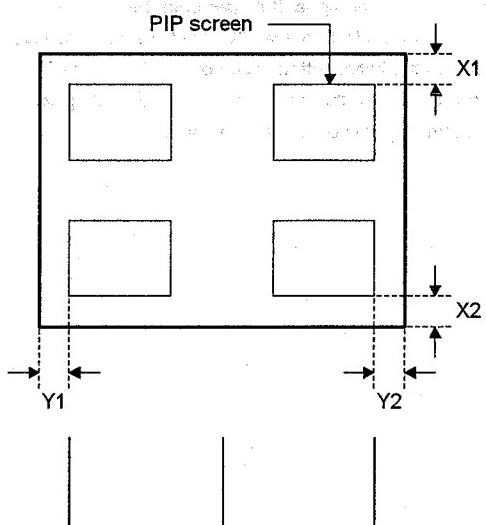
## ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

Item	Measuring instrument	Test point	Adjustment item	Description								
WHITE BALANCE (Low Light) adjustment	Signal generator Remote control unit		BRIGHT R CUTOFF G CUTOFF B CUTOFF SCREEN VR	<ol style="list-style-type: none"> <li>1. Input a black and white signal (color off).</li> <li>2. Select the LOW LIGHT mode from the SERVICE MENU.</li> <li>3. Confirm the initial setting value of "BRIGHT", "R CUTOFF", "G CUTOFF" and "B CUTOFF".</li> <li>4. Display one horizontal line by pressing the ①key of the remote control unit.</li> <li>5. Turn the screen VR all the way to the left.</li> <li>6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears slightly.</li> <li>7. Adjust the two colors which did not appear until the one horizontal line that is displayed becomes white using the ④to⑨keys of the remote control unit.</li> <li>8. Turn the screen VR until the first horizontal line is displayed slightly.</li> <li>9. Press the ②key to return to the regular screen.</li> <li>10. Check the PIP brightness and adjust it by the screen VR if it is not optimum [For except AV-32820 model].</li> </ol>								
		[LOW LIGHT] MODE										
												
WHITE BALANCE (High Light) adjustment	Signal generator Remote control unit		G DRIVE B DRIVE	<ol style="list-style-type: none"> <li>1. Input a black and white signal (color off).</li> <li>2. Select the HIGH LIGHT mode in the SERVICE MENU.</li> <li>3. Confirm the initial setting value of "G DRIVE" and "B DRIVE".</li> <li>4. Adjust the screen color to white with the ⑤, ⑥, ⑧ and ⑨ keys of the remote control unit.</li> </ol>								
		[HIGH LIGHT] MODE										
				<table border="1"> <tr> <td>Remote Control Unit</td> </tr> <tr> <td>①key : H.LINE ON</td> </tr> <tr> <td>②key : H.LINE OFF</td> </tr> <tr> <td>③key : EXIT</td> </tr> <tr> <td>⑤key : G DRIVE ▲</td> </tr> <tr> <td>⑥key : B DRIVE ▲</td> </tr> <tr> <td>⑧key : G DRIVE ▼</td> </tr> <tr> <td>⑨key : B DRIVE ▼</td> </tr> </table>	Remote Control Unit	①key : H.LINE ON	②key : H.LINE OFF	③key : EXIT	⑤key : G DRIVE ▲	⑥key : B DRIVE ▲	⑧key : G DRIVE ▼	⑨key : B DRIVE ▼
Remote Control Unit												
①key : H.LINE ON												
②key : H.LINE OFF												
③key : EXIT												
⑤key : G DRIVE ▲												
⑥key : B DRIVE ▲												
⑧key : G DRIVE ▼												
⑨key : B DRIVE ▼												

Item	Measuring instrument	Test point	Adjustment item	Description
SUB BRIGHT adjustment	Remote control unit		No.1 BRIGHT	<p>1. Receive a broadcast.</p> <p>2. Select "No.1 BRIGHT" of the PICTURE mode in SERVICE MENU.</p> <p>3. Confirm the initial setting value of the "No.1 BRIGHT".</p> <p>4. If the brightness is not the best with the initial setting value, make fine adjustment of the "No.1 BRIGHT" unit you get the optimum brightness.</p>
SUB CONTRAST adjustment	Remote control unit		No.2 PICTURE	<p>1. Receive a broadcast.</p> <p>2. Select "No.2 PICTURE" of the PICTURE mode in SERVICE MENU.</p> <p>3. Confirm the initial setting value of the "No.2 PICTURE".</p> <p>4. If the contrast is not the best with the initial setting value, make fine adjustment of the "No.2 PICTURE" unit you get the optimum contrast.</p>
SUB COLOR adjustment	Remote control unit		No.7 COLOR	<p>1. Receive a broadcast.</p> <p>2. Select "No.7 COLOR" of the PICTURE mode in SERVICE MENU.</p> <p>3. Confirm the initial setting value of the "No.7 COLOR".</p> <p>4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.</p>
SUB TINT adjustment	Remote control unit		No. 6 TINT	<p>1. Input a color bar signal (full field color bar 75% white).</p> <p>2. Select "No. 6 TINT" of the PICTURE mode in SERVECE MENU.</p> <p>3. Confirm the initial setting value of the "No. 6 TINT".</p> <p>4. If the tint is not the best with the initial setting value, make fine adjustment until you get the best tint.</p>

## ADJUSTMENT OF PIP CIRCUIT

Item	Measuring instrument	Test point	Adjustment item	Description
RF AGC (NOISE) adjustment			NOISE VR [AV SELECTOR PWB]	<ol style="list-style-type: none"> <li>Receive a broadcast to PIP child screen.</li> <li>Turn the NOISE VR so that noise appear in the picture in PIP screen.</li> <li>Then adjust the NOISE VR in the direction where noise disappears from the picture, and stop it where noise has disappeared from the picture.</li> <li>Select another channel, and make sure that there occurs no trouble.</li> </ol>
PIP DISPLAY POSITION adjustment	Signal generator		No.1 V POSITION No.2 LOWER POS. No.3 H POSITION No.4 RIGHT POS.	<ol style="list-style-type: none"> <li>Input a black and white signal (color off) to both main and pip screen.</li> <li>Select "No.1 V POSITION" of the PIP mode in SERVICE MENU.</li> <li>Confirm the initial setting value of the "No.1 V POSITION".</li> <li>Adjust the "No.1 V POSITION" so that the position of the PIP screen edge of upper will be at X1 as shown.</li> <li>Adjust the corresponding modes of "No.2, No.3, No.4" with the same steps as 2 ~ 4 above.</li> </ol>



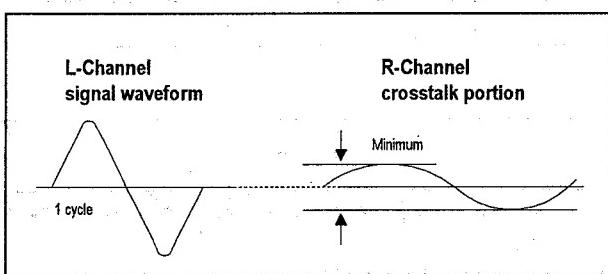
PIP SERVICE MODE No.	Item	PIP SETTING POSITION
		Approx. (mm)
No.1	UPPER POSITION (X1)	40
No.2	LOWER POSITION (X2)	40
No.3	H POSITION (Y1)	50
No.4	RIGHT POSITION (Y2)	50

Item	Measuring instrument	Test point	Adjustment item	Description
<b>PIP SUB BRIGHT adjustment</b>			<b>No.8 BRIGHT</b>	1. Receive a broadcast to both main and pip child screen. 2. Select "No.8 BRIGHT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.8 BRIGHT". 4. If the brightness of the pip child screen is not the best with initial setting value, and too difficult during main screen brightness, make fine adjustment of the "No.8 BRIGHT" until getting the optimum brightness.
<b>PIP SUB CONTRAST adjustment</b>			<b>No.7 CONTRAST</b>	1. Receive a broadcast to both main and pip child screen. 2. Select "No.7 CONTRAST" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.7 CONTRAST". 4. If the contrast of the pip child screen is not the best with initial setting value, and too difficult during main screen contrast, make fine adjustment of the "No.7 CONTRAST" until getting the optimum contrast.
<b>PIP SUB COLOR adjustment</b>			<b>No.6 COLOR SAT</b>	1. Receive a broadcast to both main and pip child screen. 2. Select "No.6 COLOR SAT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.6 COLOR SAT". 4. If the color of the pip child screen is not the best with initial setting value, and too difficult during main screen color, make fine adjustment of the "No.6 COLOR SAT" until getting the optimum color.
<b>PIP SUB TINT adjustment</b>			<b>No.5 TINT</b>	1. Receive a broadcast to both main and pip child screen. 2. Select "No.5 TINT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.5 TINT". 4. If the tint of the pip child screen is not the best with the initial setting value, and too difficult during the main screen tint, make fine adjustment of the "No.5 TINT" until getting the optimum tint.

**ADJUSTMENT OF MTS CIRCUIT**

Item	Measuring instrument	Test point	Adjustment part	Description
<b>MTS INPUT LEVEL check</b>			<b>No.4 IN LEVEL</b>	1. Select the "No.4 IN LEVEL" of the SOUND mode in SERVICE MENU. 2. Verify that the "No.4 IN LEVEL" is set at its initial setting value.
<b>MTS STEREO adjustment</b>	Signal generator Frequency counter	[MPX] Connector 2 pin RTV1 [MAIN PWB]	<b>No.5 FH MONITER</b> <b>No.6 STEREO VCO</b>	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Select the "No.5 FH MONITER" of SOUND mode in SERVICE MENU, change the setting value from 0 to 1. 3. Connect the frequency connector to pin 2 of [MPX] connector. 4. Select the "No.6 STEREO VCO". 5. Confirm the initial setting value of the "No.6 STEREO VCO". 6. Adjust the "No.6 STEREO VCO" so that the frequency counter will display $15.73\text{kHz} \pm 0.1\text{kHz}$ . 7. Select the "No.5 FH MONITER" of the SOUND mode, and reset the setting value from 1 to 0.

Item	Measuring instrument	Test point	Adjustment item	Description
MTS SAP VCO adjustment	Signal generator  Frequency counter	[MPX] Connector [4] pin SDA [3] pin GND [2] pin RTV1 [MAIN PWB]	No.11 5FH MON.  No.12 SAP VCO.	<ol style="list-style-type: none"> <li>Receive a RF signal (non modulated sound signal) from the antenna terminal.</li> <li>Connect between pin [4] of [MPX] connector and GND (pin [3] of [MPX] connector) through <math>1M\Omega</math> resistor.</li> <li>Select the "No.11 5FH MON." of the SOUND mode in SERVICE MENU, and reset the setting value from 0 to 1.</li> <li>Connect the frequency connector to pin [2] (R.OUT) of [MPX] connector.</li> <li>Select the "No.12 SAP VCO".</li> <li>Confirm the initial setting value of "No.12 SAP VCO".</li> <li>Adjust the "No.12 SAP VCO" so that the frequency connector will display <math>78.67kHz \pm 0.5kHz</math>.</li> <li>Select the "No.11 5FH MON." of the SOUND mode, and reset the setting value from 1 to 0.</li> </ol>
MTS FILTER check			No.8 FILTER	<ol style="list-style-type: none"> <li>Select the "No.8 FILTER" of the SOUND mode in SERVICE MENU.</li> <li>Verify that the "No.8 FILTER" is set at its initial setting value.</li> </ol>
MTS SEPARATION adjustment	TV audio multiplex signal generator  Oscilloscope	[MPX] Connector [1] pin LTV1 [2] pin RTV1 [MAIN PWB]	No.9 LOW SEP.  No.10 HI SEP.	<ol style="list-style-type: none"> <li>Input a stereo L signal (300Hz) from the TV Audio multiplex signal generator to the antenna terminal.</li> <li>Connect an oscilloscope to pin [1] (L.OUT) of [MPX] connector, and display one cycle portion of the 300Hz signal.</li> <li>Change the connection of the oscilloscope to pin [2] (R.OUT) of [MPX] connector, and enlarge the voltage axis.</li> <li>Select the "No.9 LOW SEP." of the SOUND mode in SERVICE MENU.</li> <li>Confirm the initial setting value of the "No.9 LOW SEP.".</li> <li>Adjust the "No.9 LOW SEP." so that the stroke element of the 300Hz signal will become minimum.</li> <li>Change the signal to 3kHz, and similarly adjust the "No.10 HI SEP.".</li> </ol>



## HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

### 1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.

This circuit shall be checked to operate correctly.

### 2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

- (1) Turn the POWER SW ON.
- (2) As shown in Fig.2, set the resistor (between X connector [1] & [3]).
- (3) Make sure that the screen picture disappears.
- (4) Temporarily unplug the power cord.
- (5) Remove the resistor (between X connector [1] & [3]).
- (6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

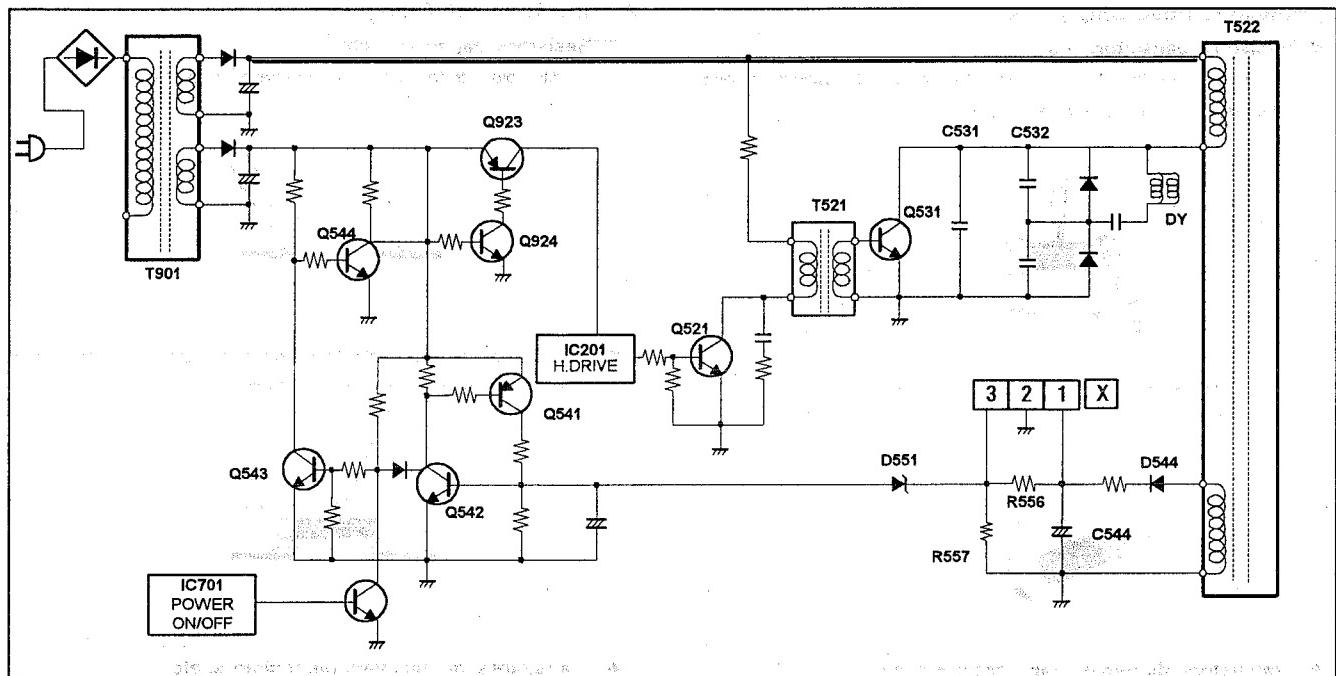


Fig. 1

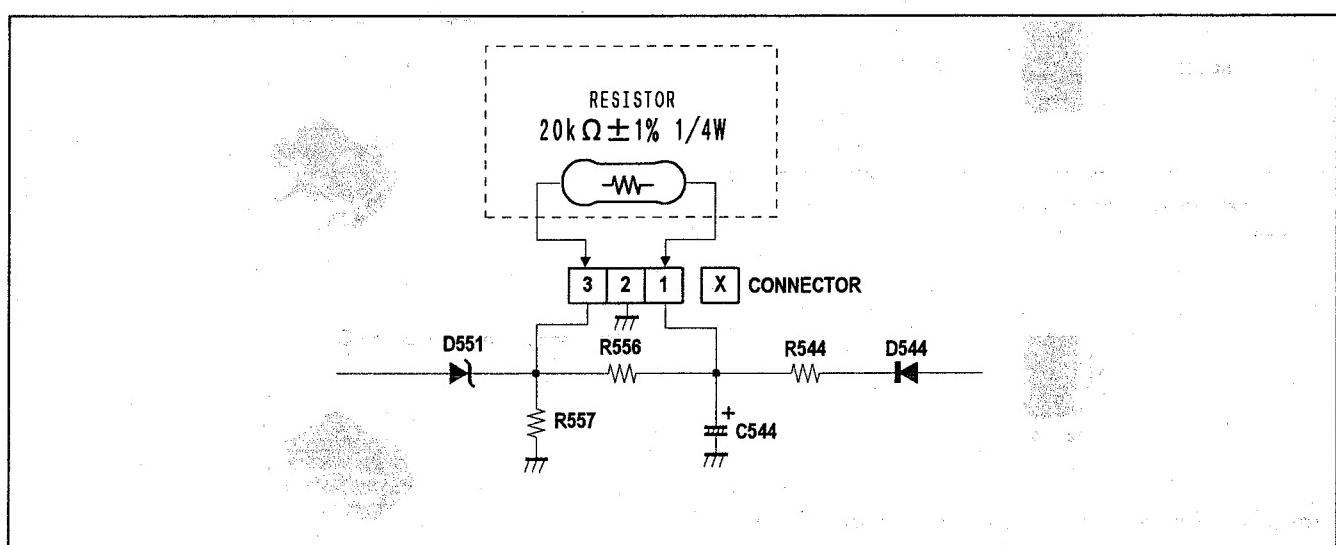


Fig. 2

## REPLACEMENT OF CHIP COMPONENT

### ■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

### ■ SOLDERING IRON

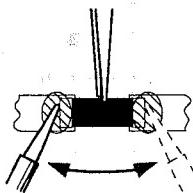
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

### ■ REPLACEMENT STEPS

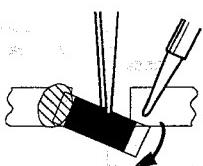
#### 1. How to remove Chip parts

##### ◆ Resistors, capacitors, etc.

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

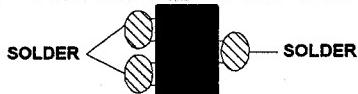


- (2) Shift with tweezers and remove the chip part.

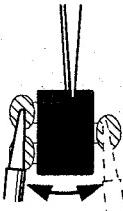


##### ◆ Transistors, diodes, variable resistors, etc.

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

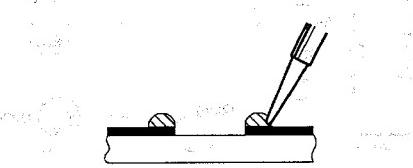


Note : After removing the part, remove remaining solder from the pattern.

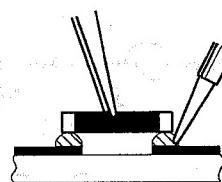
#### 2. How to install Chip parts

##### ◆ Resistors, capacitors, etc.

- (1) Apply solder to the pattern as indicated in the figure.



- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

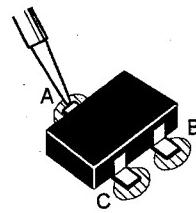


##### ◆ Transistors, diodes, variable resistors, etc.

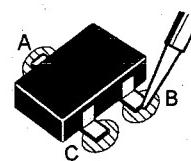
- (1) Apply solder to the pattern as indicated in the figure.

- (2) Grasp the chip part with tweezers and place it on the solder.

- (3) First solder lead A as indicated in the figure.



- (4) Then solder leads B and C.



# AV-36850(US&CA) AV-36870(US&CA) STANDARD CIRCUIT DIAGRAM

## ■ NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

The components identified by the  symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal :Color bar signal
- (2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
- (3)Internal resistance of tester :DC 20kΩ/V
- (4)Oscilloscope sweeping time :H ⇒ 20μS/div  
:V ⇒ 5mS/div  
:Others ⇒ Sweeping time is specified
- (5)Voltage values :All DC voltage values

\* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

### 3.INDICATION OF PARTS SYMBOL[EXAMPLE]

•In the PW board :R1209→R209

### 4.INDICATIONS ON THE CIRCUIT DIAGRAM

#### (1)Resistors

•Resistance value

- No unit :[Ω]
- K :[KΩ]
- M :[MΩ]

•Rated allowable power

No indication :1/6[W]

Others :As specified

•Type

- No indication :Carbon resistor
- OMR :Oxide metal film resistor
- MFR :Metal film resistor
- MPR :Metal plate resistor
- UNFR :Uninflammable resistor
- FR :Fusible resistor

\* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

#### (2)Capacitors

•Capacitance value

- 1or higher :[pF]
- less than 1 :[μF]

•Withstand voltage

- No indication :DC50[V]
- Others :DC withstand voltage[V]
- AC indicated :AC withstand voltage[V]

\* Electrolytic Capacitors

47/50[Example]:Capacitance value[μF]/withstand voltage[V]

#### •Type

- |               |                                     |
|---------------|-------------------------------------|
| No indication | :Ceramic capacitor                  |
| MY            | :Mylar capacitor                    |
| MM            | :Metallized mylar capacitor         |
| PP            | :Polypropylene capacitor            |
| MPP           | :Metallized polypropylene capacitor |
| MF            | :Metallized film capacitor          |
| TF            | :Thin film capacitor                |
| BP            | :Bipolar electrolytic capacitor     |
| TAN           | :Tantalum capacitor                 |

#### (3)Coils

- |         |               |
|---------|---------------|
| No unit | :[μH]         |
| Others  | :As specified |

#### (4)Power Supply

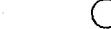
- |   |          |
|---|----------|
|  | :B1      |
|  | :B2(12V) |
|  | :9V      |
|  | :5V      |

\* Respective voltage values are indicated.

#### (5)Test Point

- |   |                           |
|---|---------------------------|
|   | : Test point              |
|  | : Only test point display |

#### (6)Connecting method

- |   |                         |
|---|-------------------------|
|  | : Connector             |
|  | : Wrapping or soldering |
|  | : Receptacle            |

#### (7)Ground symbol

- |   |                                 |
|---|---------------------------------|
|  | : LIVE side ground              |
|  | : ISOLATED(NEUTRAL) side ground |
|  | : EARTH ground                  |
|  | : DIGITAL ground                |

### 5.NOTE FOR REPAIRING SERVICE

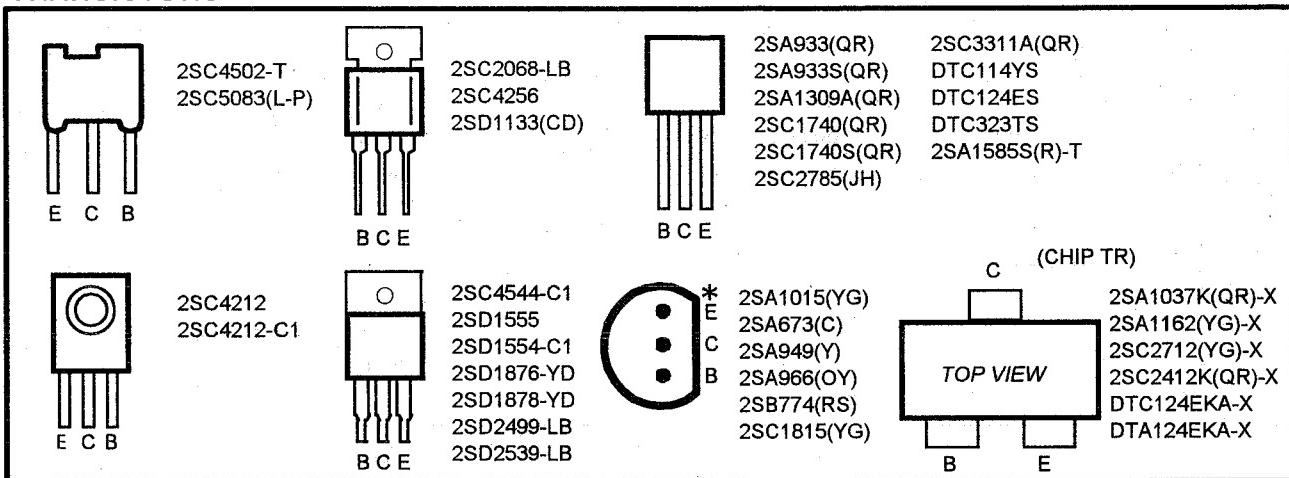
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND. Therefore, care must be taken for the following points.

- (1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

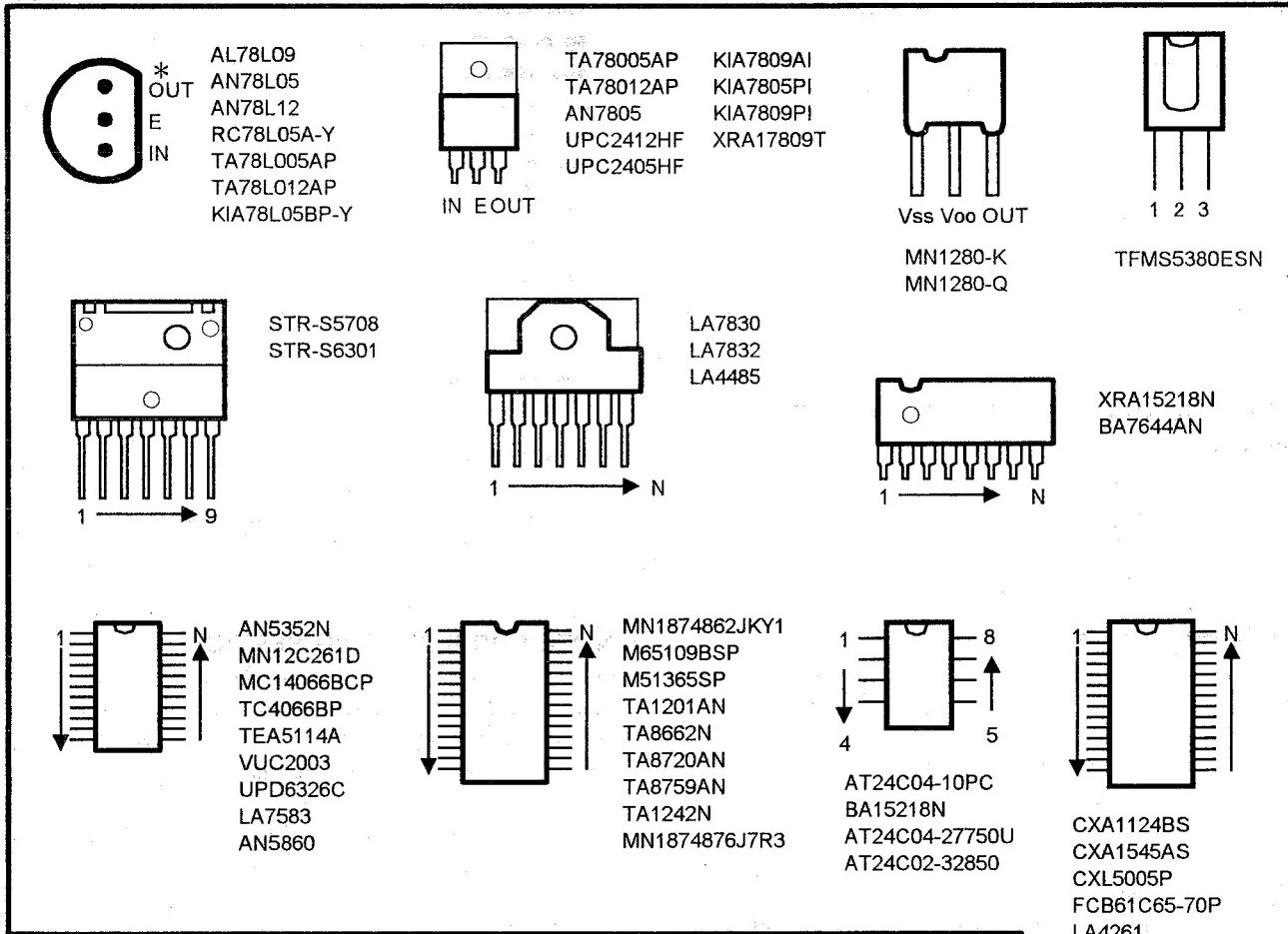
◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

## SEMICONDUCTOR SHAPES (\*= Bottom view)

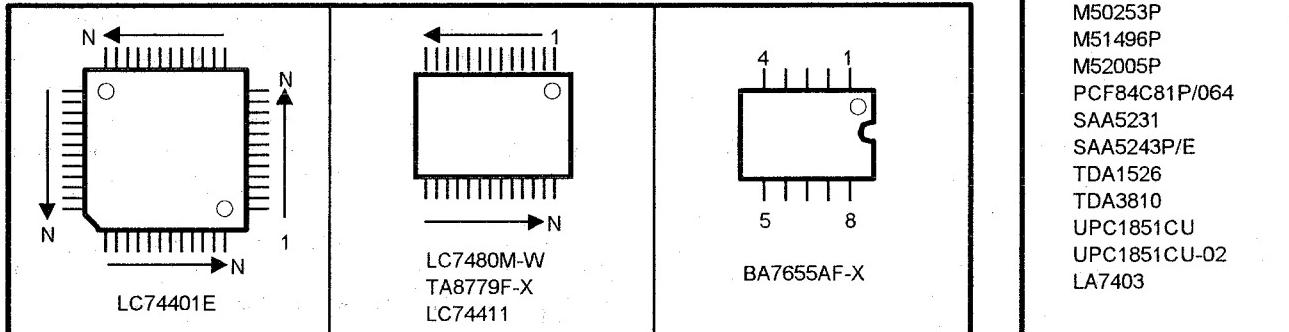
### TRANSISTORS



### ICs



### CHIP ICs



## ■ CHANNEL CHART(US)

MODE		BAND	CHANNEL		TUNER
TV	CATV		REAL	DISP.	BAND
○	○	VL	02		I
			03		
			04		
			05		
			06		
			07		II
		VH	08		
			09		
			10		
			11		
			12		
			13		
			A 14		I
X	○	MID	B 15		
			C 16		
			D 17		
			E 18		
			F 19		
			G 20		
			H 21		
			I 22		
		SUPER	J 23		
			K 24		
			L 25		
			M 26		
			N 27		
			O 28		
			P 29		
			Q 30		
			R 31		
			S 32		
			T 33		
			U 34		
		HYPER	V 35		
			W 36		
			W+1 37		
			W+2 38		
			W+3 39		
			W+4 40		
			W+5 41		
			W+6 42		
			W+7 43		
			W+8 44		
			W+9 45		
			W+10 46		
		HYPER	W+11 47		
			W+12 48		
			W+13 49		
			W+14 50		
			W+15 51		
			W+16 52		
			W+17 53		
			W+18 54		
			W+19 55		
			W+20 56		
			W+21 57		
		ULTRA	W+22 58		
			W+23 59		
			W+24 60		
			W+25 61		
			W+26 62		
			W+27 63		
			W+28 64		
			W+29 65		
			W+30 66		
			W+31 67		
			W+32 68		
			W+33 69		
			W+34 70		

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AV-36870

AV-36850  
AV-36870

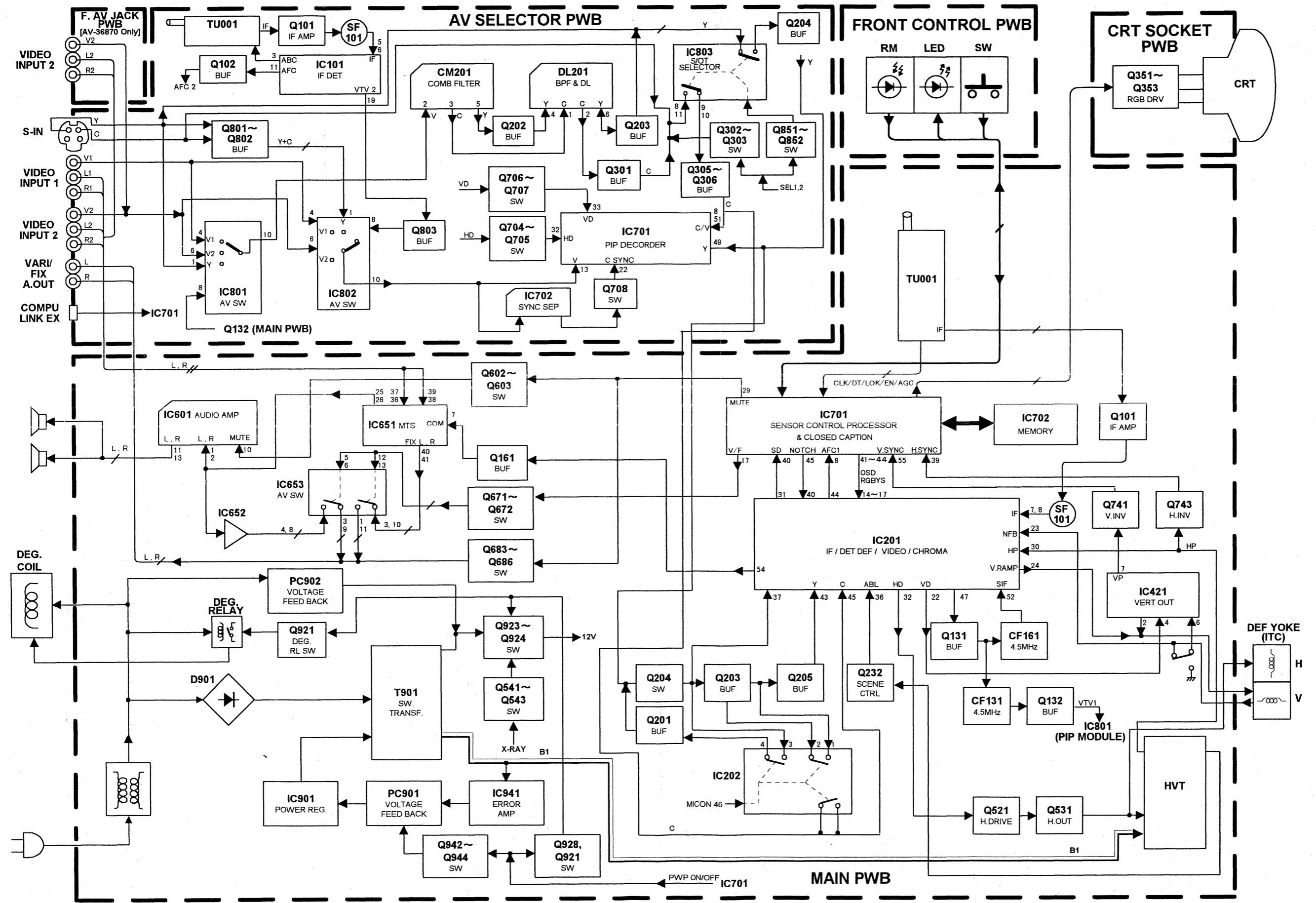
## CHANNEL CHART(CA)

MODE		BAND	CHANNEL		TUNER
TV	CATV		REAL	DISP.	BAND
		VL	W+35	71	
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
			A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
			A-1	99	
			14		IV
		UHF	S		
			69		
TOTAL 180CH					
{ VHF 124CH					
{ UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

NOTE:  
TO RECEIVE THE SUBSCRIPTION OR  
PREMIUM PROGRAMMING FROM CERTAIN  
CABLE COMPANIES.  
SPECIAL ADAPTERS MAY BE REQUIRED.

MODE		BAND	CHANNEL		TUNER
TV	CATV		REAL	DISP.	BAND
○	○	VL	02		I
			03		
			04		
			05		
			06		
			07		II
		VH	08		
			09		
			10		
			11		
			12		
			13		
			A 14		I
			B 15		

## BLOCK DIAGRAM

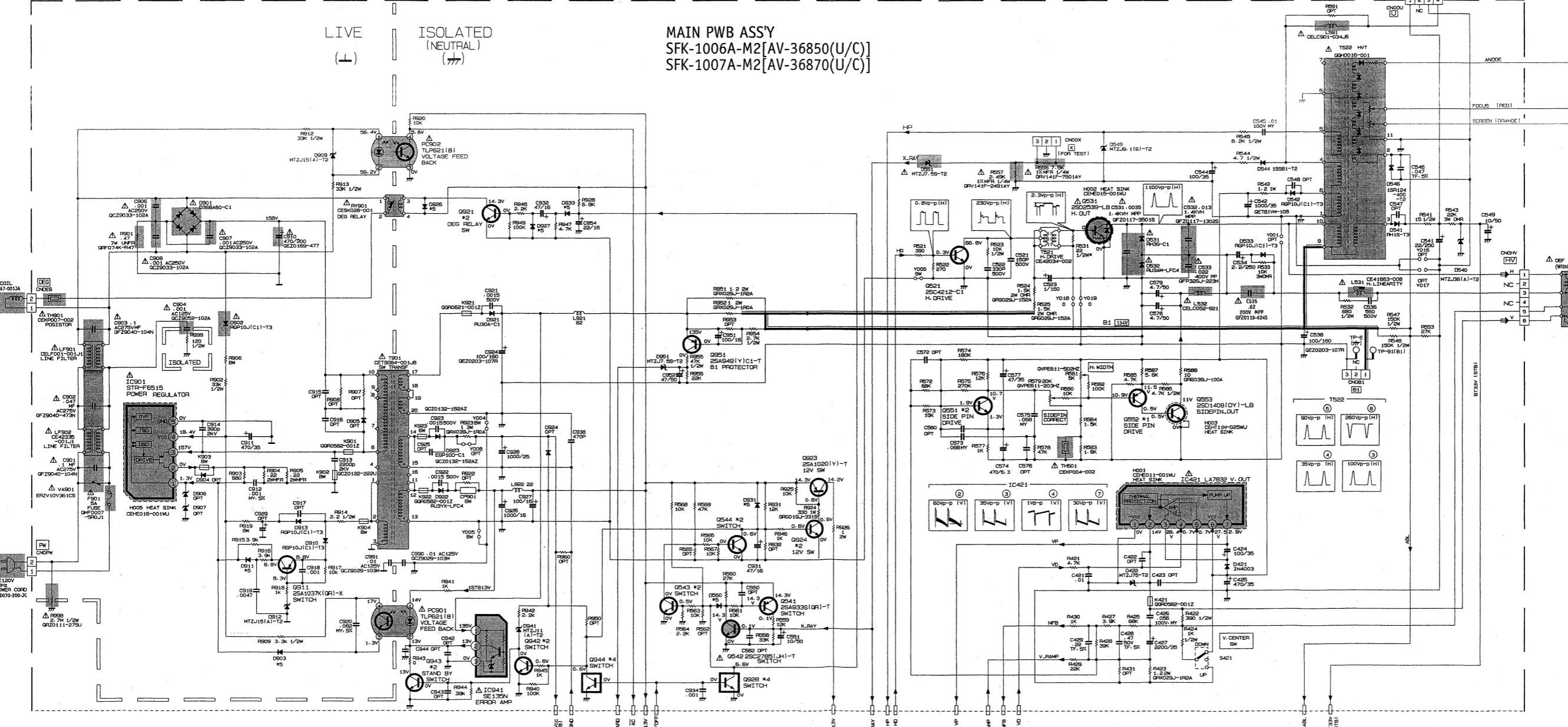
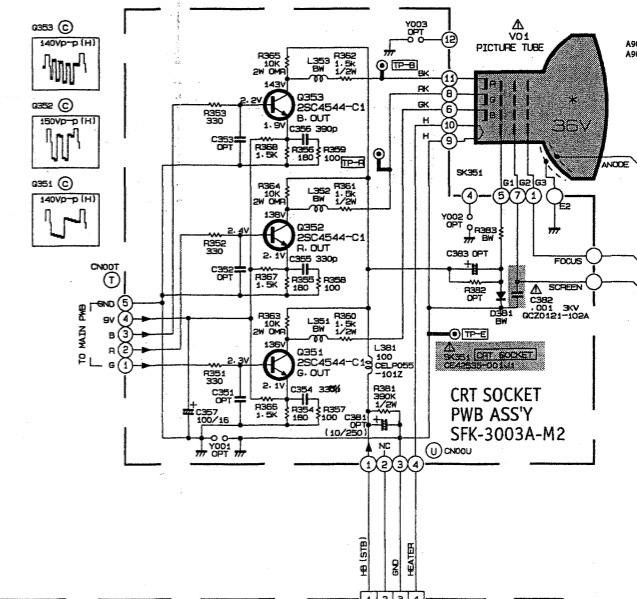


AV-36850  
AV-36870

AV-36850  
AV-36870

## CIRCUIT DIAGRAMS AND PWB PATTERNS

MAIN PWB AND CRT SOCKET PWB CIRCUIT DIAGRAMS

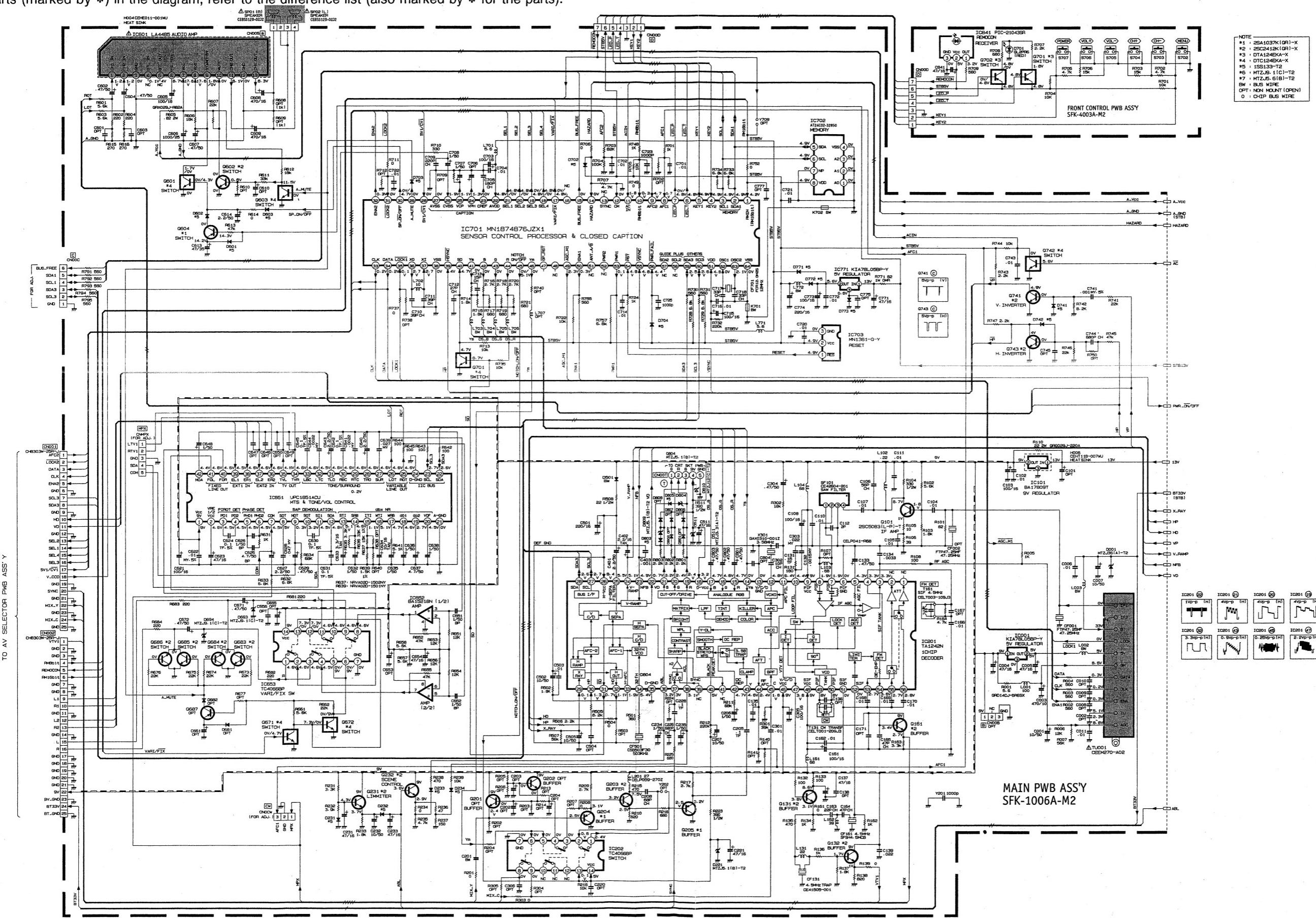
[AV-36850(US&CA)]  
[AV-36870(US&CA)]Refer to the following PWB pattern. : MAIN PWB PATTERN page 2-15~2-16.  
CRT SOCKET PWB PATTERN page 2-18.

## MAIN PWB AND FRONT CONTROL PWB CIRCUIT DIAGRAMS

[AV-36850(US&amp;CA)]

This schematic diagram is applicable to both (US) and (CA) models.

As for the parts (marked by \*) in the diagram, refer to the difference list (also marked by \* for the parts).



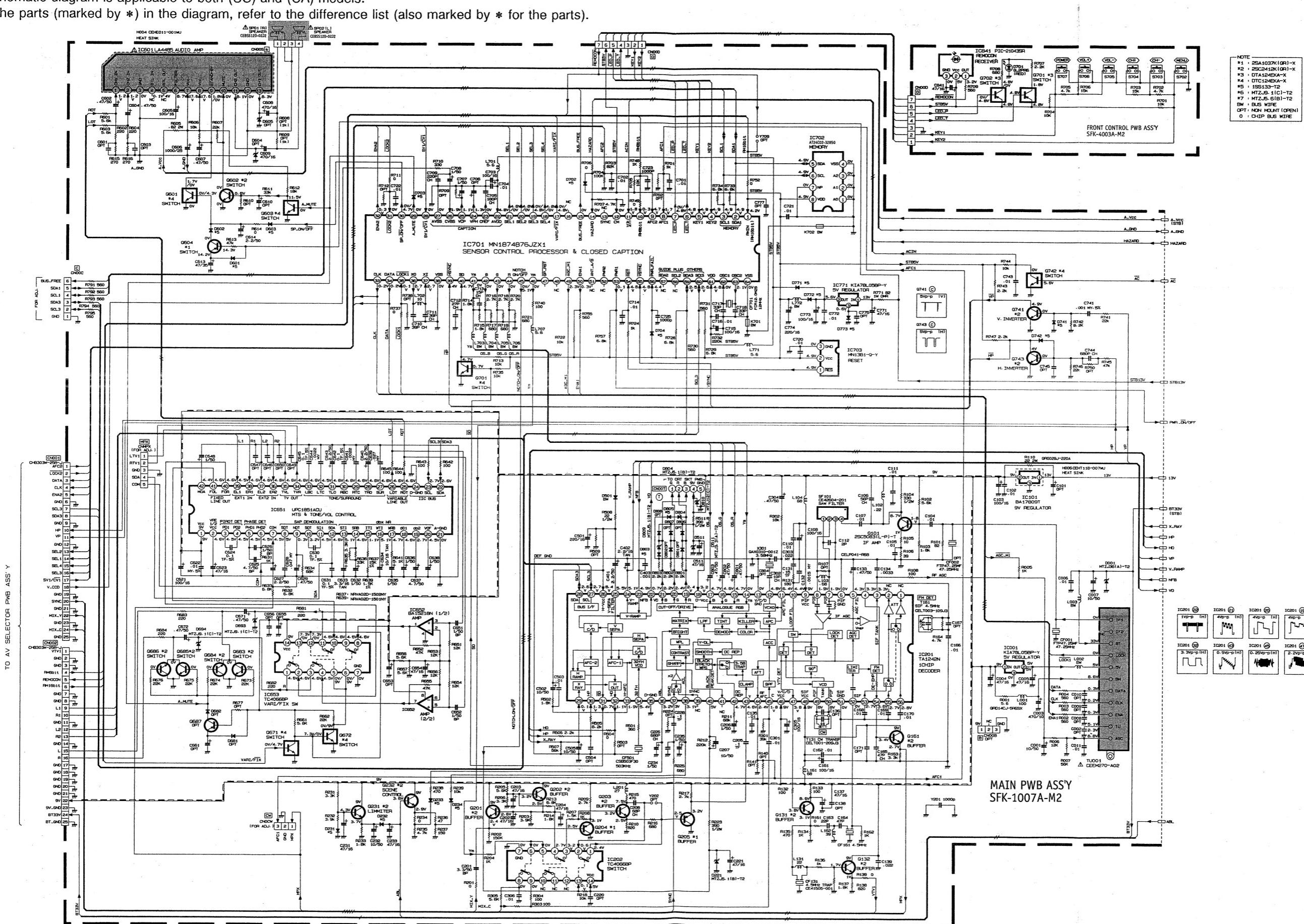
#### **MAIN PWB AND FRONT CONTROL PWB CIRCUIT DIAGRAMS**

[AV-36870(US&CA)]

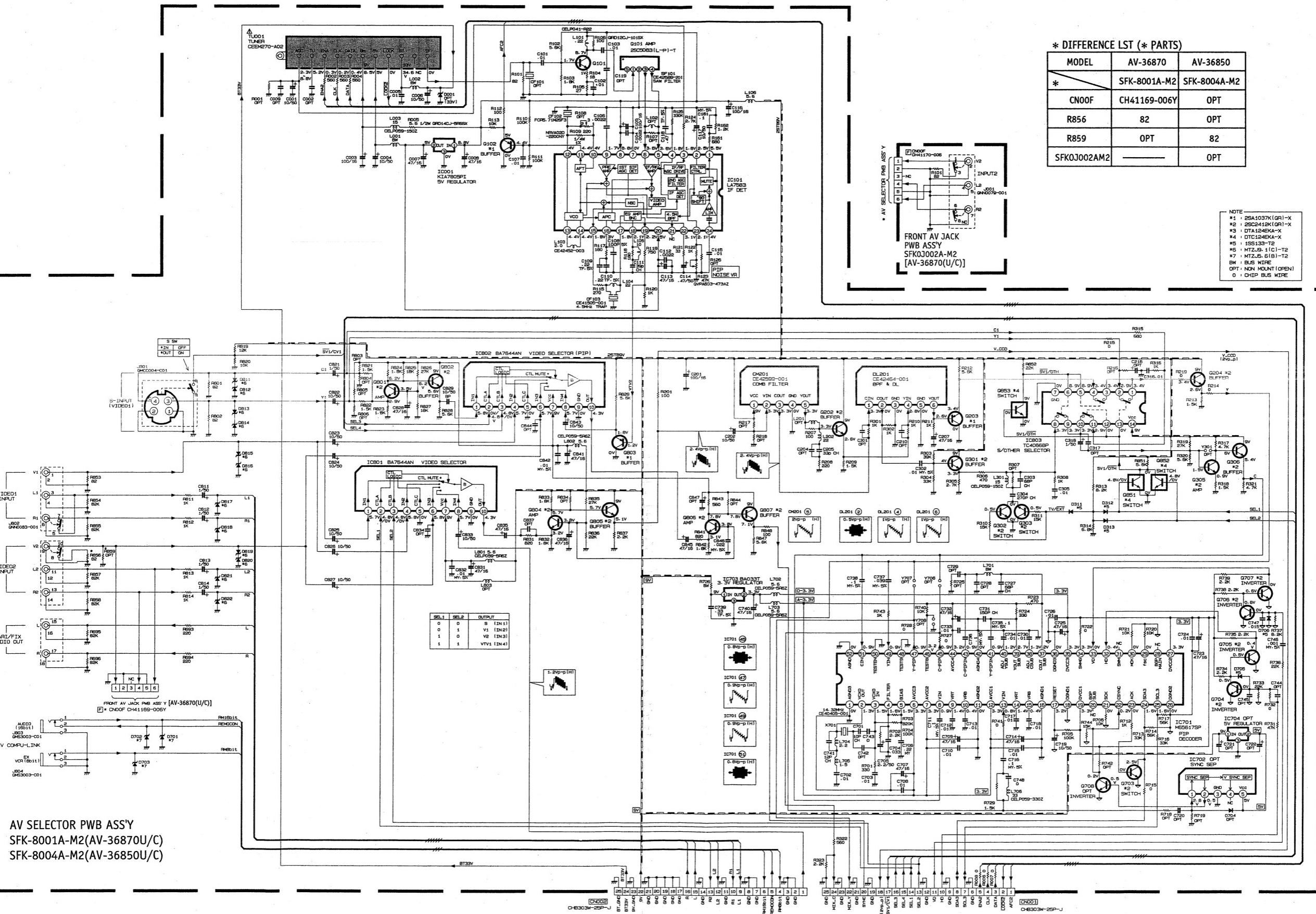
This schematic diagram is applicable to both (US) and (CA) models.

As for the parts (marked by \*) in the diagram, refer to the difference list (also marked by \* for the parts).

Refer to the following PWB pattern.: MAIN PWB PATTERN page 2-15~2-16, FRONT CONTROL PWB PATTERN page 2-19.



## AV SELECTOR PWB AND FRONT AV JACK PWB CIRCUIT DIAGRAMS

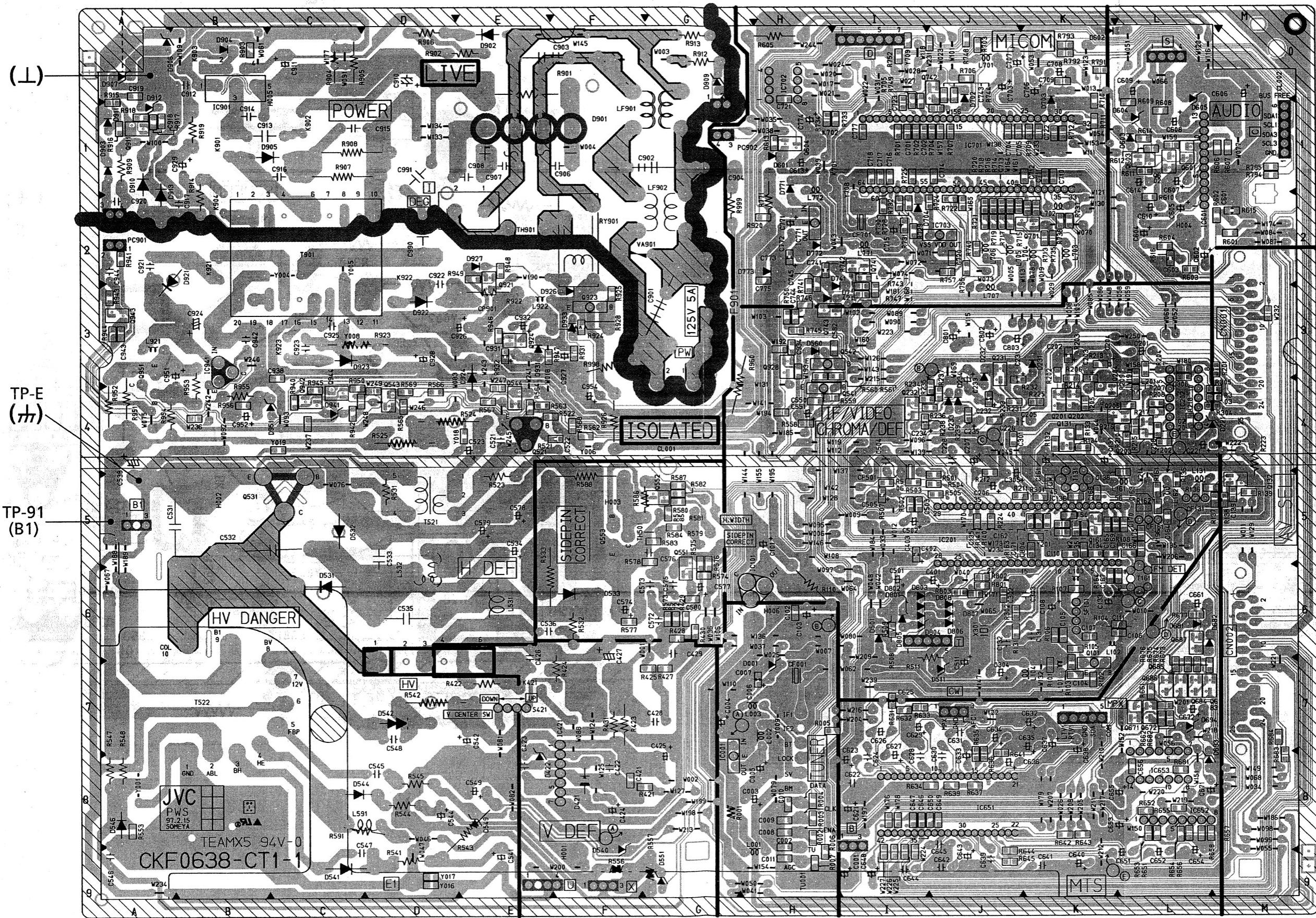
[AV-36850(US&CA)]  
[AV-36870(US&CA)]Refer to the following PWB pattern. : AV SELECTOR PWB PATTERN page 2-17.  
FRONT AV JACK PWB PATTERN page 2-19.

## MAIN PWB PATTERN

[SFK-1006A-M2 : AV-36850(US&CA)]  
[SFK-1007A-M2 : AV-36870(US&CA)]

(Magnification Rate 95%)

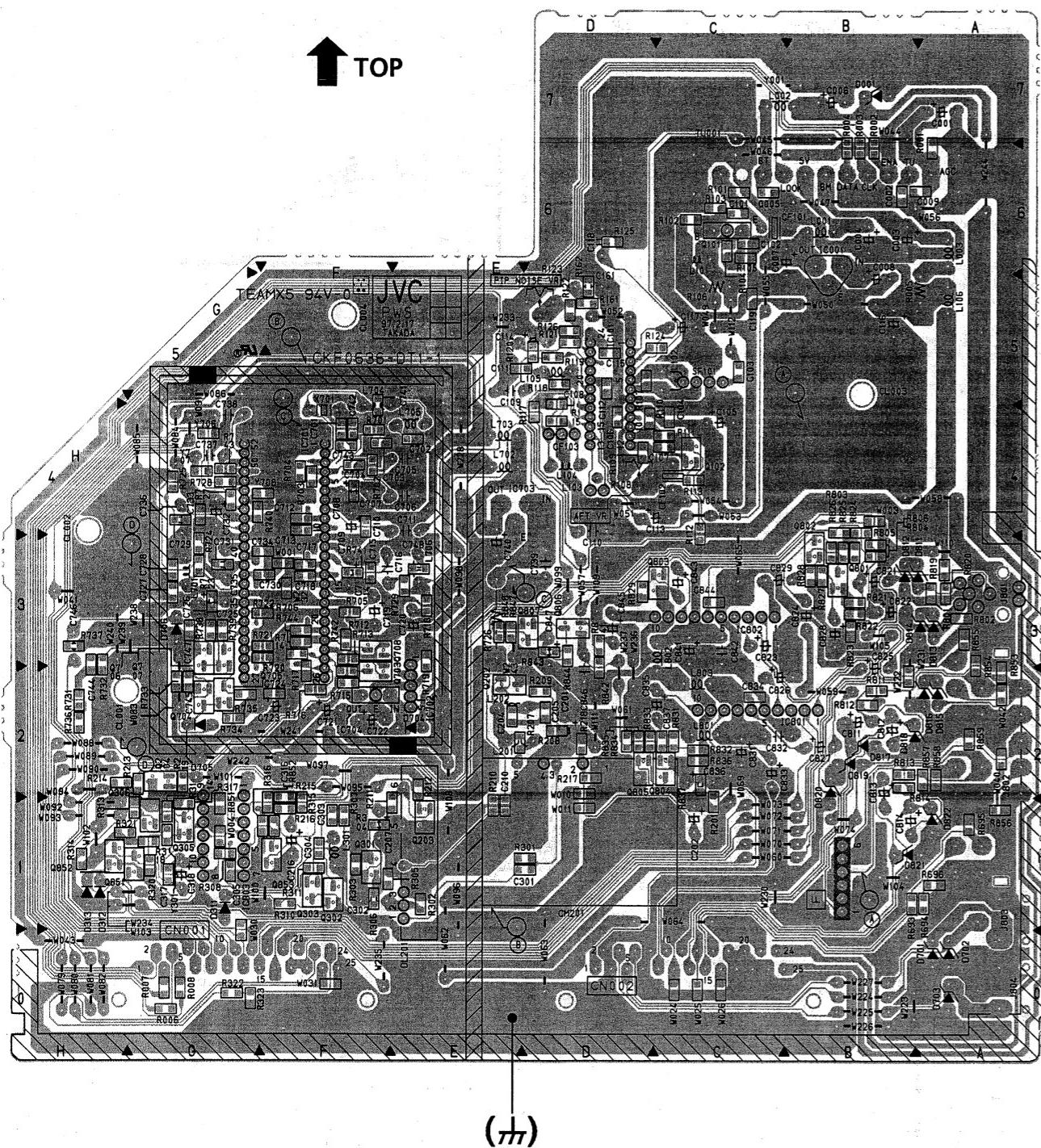
FRONT



## AV SELECTOR PWB PATTERN

[SFK-8004A-M2 : AV-36850(US&CA)]  
[SFK-8001A-M2 : AV-36870(US&CA)]

(Magnification Rate 86%)



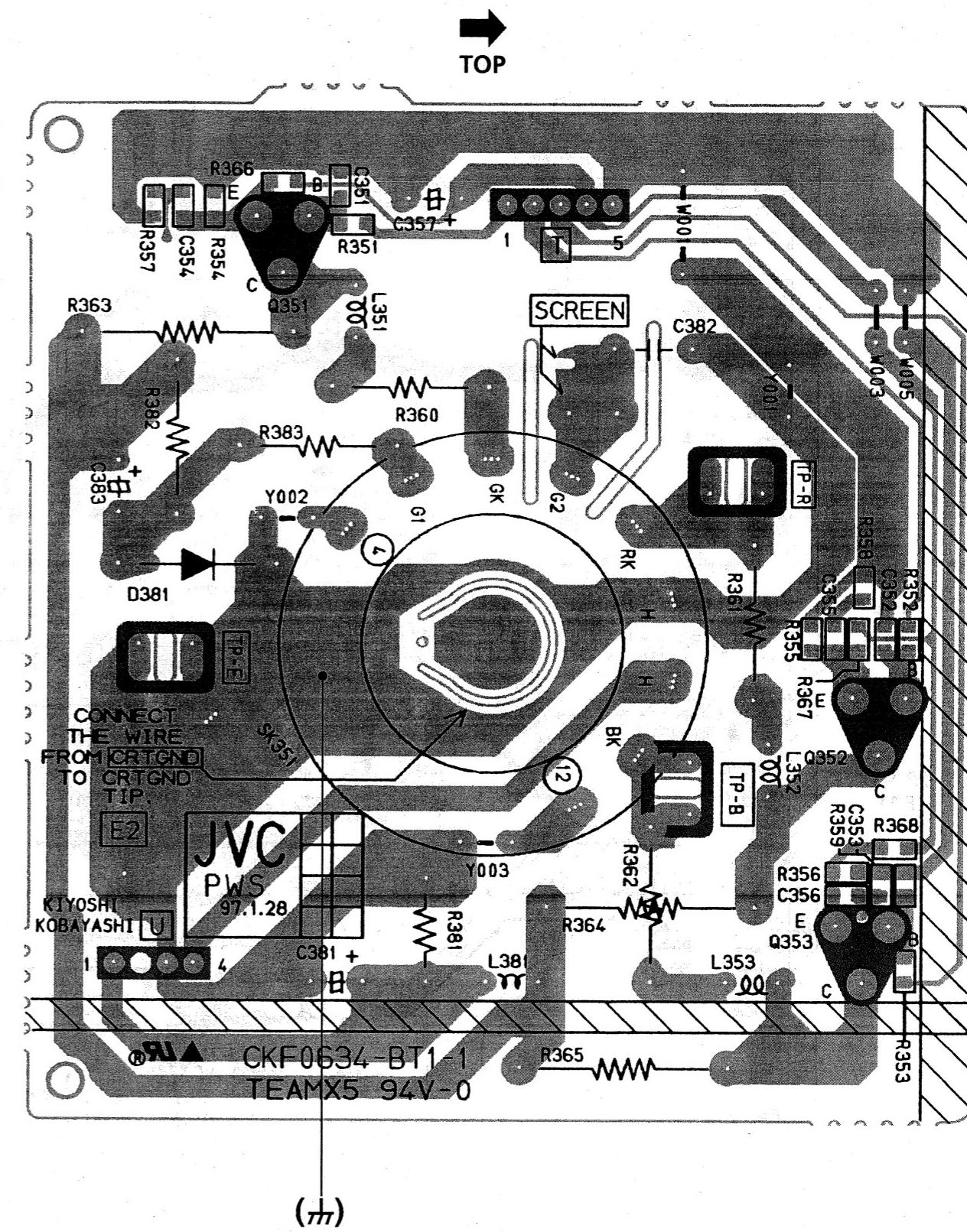
AV-36850  
AV-36870

AV-36850  
AV-36870

CRT SOCKET PWB PATTERN

[SFK-3003A-M2]

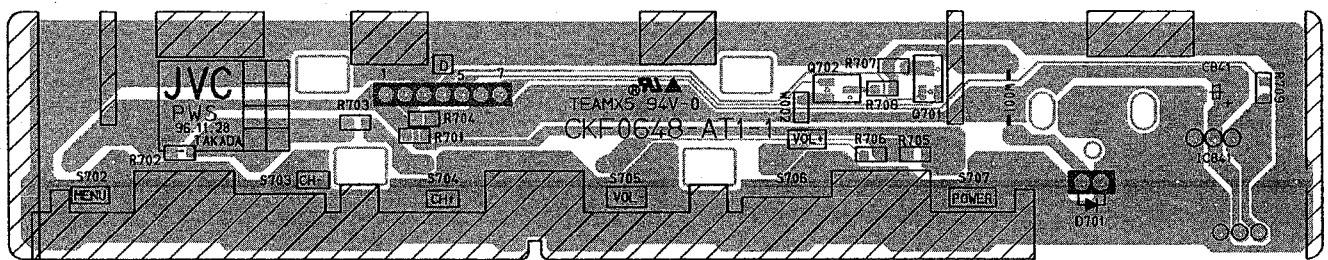
(Magnification Rate 180%)



FRONT CONTROL PWB PATTERN

[SFK-4003A-M2]

(Magnification Rate 100%)



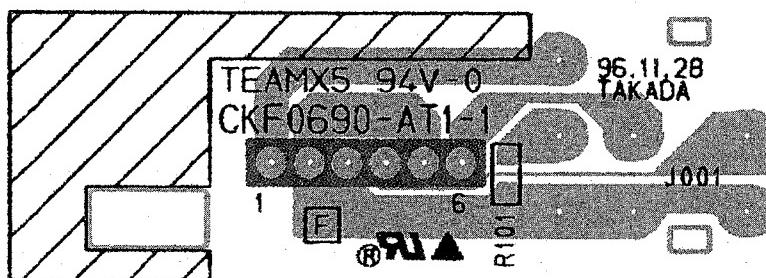
FRONT

FRONT AV JACK PWB PATTERN [AV-36870(US&CA)]

[SFK0J002A-M2]

(Magnification Rate 200%)

FRONT



AV-36850  
AV-36870

VP9705  
DP30MY

No.51214

2-20

# PARTS LIST

## CAUTION

- The parts identified by the  symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .
- As a rule, the resistors and capacitors which are indicated as shown in "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board .

When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" .

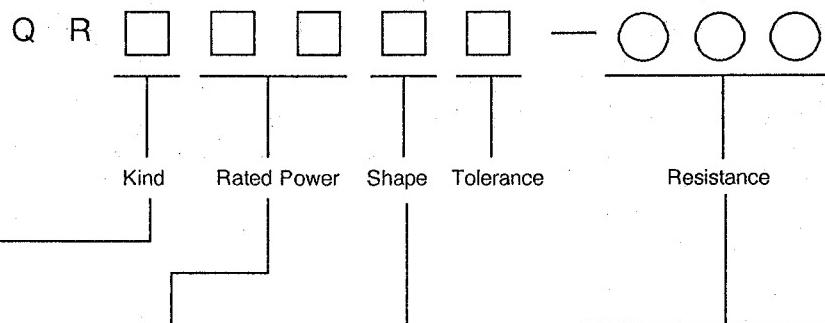
## ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
H V R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	± 10%	± 20%	± 30%	+ 30% - 10%	+ 50% - 10%	+ 80% - 20%	+ 100% - 0%

## HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

### ■ RESISTOR



Symbol	Part Name
C	COMP.R
D	C R
S	CH MG R

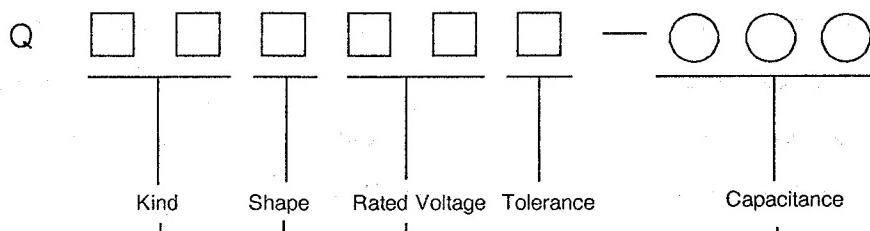
Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by  $\Omega$  and following 0.  
please note that,in case of resistance less than 10  $\Omega$ , a letter "R" will be effective as point.

EX.  
 $2.2 \Omega = 2R2$   
 $470 \Omega = 47 \times 10^1 \rightarrow 471$   
 $150k\Omega = 15 \times 10^4 \rightarrow 154$

### ■ CAPACITOR



Symbol	Part Name
CS	C CAP.
CS	CH C CAP.
ET	E CAP.
FM	M CAP.

5Figure 6Figure	0	1	2
A	10V	100V	
C	16V	160V	
D		200V	
E	25V	250V	
H	50V	500V	
J	6.3V	63V	
V	35V		

Indicate with first two-figure expressed by pF and following 0.

Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.

EX  
 $5pF = 5R0$   
 $1000pF = 10 \times 10^2 \rightarrow 102$   
 $47\mu F = 47 \times 10^6 \rightarrow 476$

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (compact part)

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## USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y	Model	AV-36850(US&CA)	AV-36870(US&CA)
MAIN P.W.B		SFK-1006A-M2	SFK-1007A-M2
CRT SOCKET P.W.B		SFK-3003A-M2	←
FRONT CONTROL P.W.B		SFK-4003A-M2	←
AV SELECTOR P.W.B		SFK-8004A-M2	SFK-8001A-M2
FORNT AV JACK P.W.B		—	SFK0J002A-M2
REMOTE CONTROL UNIT		RM-C745-1C	RM-C885-1A

## EXPLODED VIEW PARTS LIST

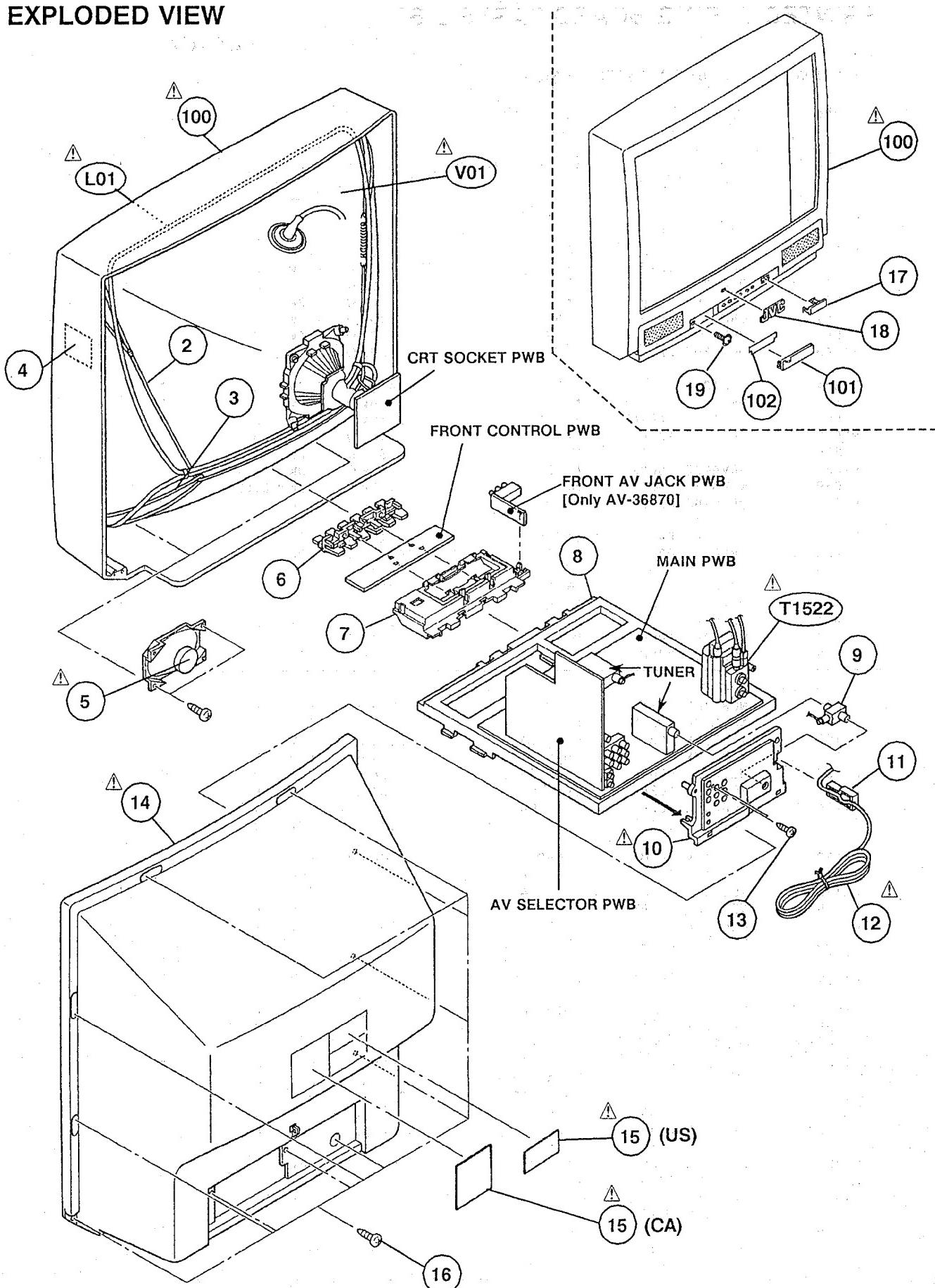
### [AV-36850(US&CA)]

Ref. No.	Part No.	Part Name	Description	Local
△ L01	CELD067-001JA	DEG COIL		*
△ V01	A90AEJ15X01	PICTURE TUBE(ITC)	(Inc.DY,PC,WED)	*
△ T1522	QH0016-001	HVT	(With in MAIN PWB ASSY)	*
2	CHGB0009-0D	BRAIDED WIRE		*
3	CHGB0016-0D	BRAIDED WIRE	(×2)	*
4	CM48206-001-A	WARNING LABEL		*
△ 5	CEBSS12D-02J2	SPEAKER	(×2)SP01,SP02	*
6	CM35776-B01-H	PUSH KNOB		*
8	CM12689-B01-VA	CHASSIS BASE		*
9	CEGA008-001	ANT SPLITTER		*
△ 10	CM23125-A01-VA	TERMINAL BOARD		*
11	CM48140-A03-A	CORD CLAMP		*
△ 12	QMPD070-200-JC	POWER CORD		*
13	SBSB3010Z	TAPPING SCREW	(×2)	*
△ 14	CM12634-D02-MA	REAR COVER		*
△ 15	CM23034-001-A	RATING LABEL	(US)	*
△ 15	CM22999-001-A	RATING LABEL	(CA)	*
16	GBSB4016Z	TAPPING SCREW	(×11)	*
17	CM35983-001-H	REMOCON WINDOW		*
18	CM46084-A01	BRAND MARK		*
△ 100	CM12747-00F-MA	F.CABINET ASSY	Inc.No.101	*
101	CM36162-006-A	DOOR		*

### [AV-36870(US&CA)]

Ref. No.	Part No.	Part Name	Description	Local
△ L01	CELD067-001JA	DEG COIL		*
△ V01	A90AFX15X01	PICTURE TUBE(ITC)	(Inc.DY,PC,WED)	*
△ T1522	QH0016-001	HVT	(With in MAIN PWB ASSY)	*
2	CHGB0009-0D	BRAIDED WIRE		*
3	CHGB0016-0D	BRAIDED WIRE	(×2)	*
4	CM48206-001-A	WARNING LABEL		*
△ 5	CEBSS12D-02J2	SPEAKER	(×2)SP01,SP02	*
6	CM35776-B01-H	PUSH KNOB		*
7	CM22670-001-A	CONTROL BASE		*
8	CM12416-E01-VA	CHASSIS BASE		*
9	CEGA008-001	ANT SPLITTER		*
△ 10	CM23125-A01-VA	TERMINAL BOARD		*
11	CM48140-A03-A	CORD CLAMP		*
△ 12	QMPD070-200-JC	POWER CORD		*
13	SBSB3010Z	TAPPING SCREW	(×2)	*
△ 14	CM12634-D02-MA	REAR COVER		*
△ 15	CM23034-001-A	RATING LABEL	(US)	*
△ 15	CM22999-001-A	RATING LABEL	(CA)	*
16	GBSB4016Z	TAPPING SCREW	(×11)	*
17	CM35983-001-H	REMOCON WINDOW		*
18	CM46084-A01	BRAND MARK		*
19	SDSB3010M	TAPPING SCREW		*
△ 100	CM12747-00G-MA	F.CABINET ASSY	Inc.No.101~102	*
101	CM36162-005-A	DOOR		*
102	CM48272-001-A	SHEET		*

## EXPLODED VIEW



## PRINTED WIRING BOARD PARTS LIST

AV-36850(US&amp;CA)

## MAIN PW BOARD ASS'Y ( SFK-1006A-M2 )

△ Symbol No.	Part No.	Part Name	Description	Local
<b>V A R I A B L E   R E S I S T O R</b>				
R1579	QVPE611-203HZ	V R(SIDEPIN CORRECT)	20kΩ B	*
R1581	QVPE611-502HZ	V R(H.WIDTH)	5kΩ B	*
<b>R E S I S T O R</b>				
R1001	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W	J *
R1110	QRG029J-220A	OM R	22 Ω 2W	J *
R1423	QRX029J-1R2A	MF R	1.2 Ω 2W	J *
R1524-25	QRG029J-152A	OM R	1.5kΩ 2W	J *
R1533	QRG039J-103A	OM R	10kΩ 3W	J *
R1541	QRD129J-150S	C R	15 Ω 1/2W	J *
R1542	QRX019J-1R2S	MF R	1.2 Ω 1W	J *
R1543	QRG039J-223A	OM R	22kΩ 3W	J *
R1544	QRD129J-4R7S	C R	4.7 Ω 1/2W	J *
△ R1556	QRV141F-7501AY	MF R	7.5kΩ 1/4W	F *
△ R1557	QRV141F-2491AY	MF R	2.49kΩ 1/4W	F *
R1588	QRG039J-100A	OM R	10 Ω 3W	J *
R1605	QRX029J-R82A	MF R	0.82 Ω 2W	J *
R1637	NRVA02D-1502NY	MF R	15kΩ 1/10W ± 0.5%	*
R1639	NRVA02D-1501NY	MF R	1.5kΩ 1/10W ± 0.5%	*
R1771	QRG019J-820S	OM R	82 Ω 1W	J *
△ R1901	QRF074K-R47	UNF R	0.47 Ω 7W	K *
R1904-05	QRX029J-R22A	MF R	0.22 Ω 2W	J *
R1923	QRX039J-1R0A	MF R	1 Ω 3W	J *
R1924	QRG019J-331S	OM R	330 Ω 1W	J *
R1926	QRX029J-1R0A	MF R	1 Ω 2W	J *
R1951	QRX029J-1R2A	MF R	1.2 Ω 2W	J *
R1952	QRX029J-1R0A	MF R	1 Ω 2W	J *
△ R1998	QRZ0111-275U	C R	2.7MΩ 1/2W	*
<b>C A P A C I T O R</b>				
C1006	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1011	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1102	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1104-05	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1106	NCT03CH-560AY	CHIP CAP.	56 p F 50V	J *
C1107	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1110-11	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1131	QFV71HJ-154MZ	TF CAP.	0.15 μ F 50V	J *
C1132	QFLC1HK-152MZ	M CAP.	1500 p F 50V	K *
C1134	NCB21HK-332AY	CHIP CAP.	3300 p F 50V	K *
C1135	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1139	NCB21HK-223AY	CHIP CAP.	0.022 μ F 50V	K *
C1162	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1163	NCT03CH-220AY	CHIP CAP.	22 p F 50V	J *
C1164-65	NCT03CH-470AY	CHIP CAP.	47 p F 50V	J *
C1166	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1168-70	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1205	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V	J *
C1208	NCT03CH-680AY	CHIP CAP.	68 p F 50V	J *
C1226	NCT03CH-681AY	CHIP CAP.	680 p F 50V	J *
C1228	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V	J *
C1301	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1302	NCT03CH-100AY	CHIP CAP.	10 p F 50V	J *
C1303	QFLC1HK-223MZ	M CAP.	0.022 μ F 50V	K *
C1402	QEE61CK-225BZ	TAN.CAP.	2.2 μ F 16V	K
C1403	NCB21HK-102AY	CHIP CAP.	1000 p F 50V	K *
C1421	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1424	QETC1VM-107Z	E CAP.	100 μ F 35V	M *
C1425	QETC1VM-477Z	E CAP.	470 μ F 35V	M *
C1426	QFLC2AK-563MZ	M CAP.	0.056 μ F 100V	K *
C1428	QFV71HJ-474MZ	TF CAP.	0.47 μ F 50V	J *

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△ Symbol No.	Part No.	Part Name	Description	Local
C A P A C I T O R				
C1429	QFV71HJ-224MZ	TF CAP.	0.22 μ F 50V J	*
C1503	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1523	QETC2CM-105Z	E CAP.	1 μ F 160V M	*
△ C1531	QFZ0117-3501S	MPP CAP.	3500 p F 1.4kVH ± 2.5%	*
△ C1532	QFZ0117-1302S	MPP CAP.	0.013 μ F 1.4kVH ± 2.5%	*
△ C1533	QFP32GJ-223M	PP CAP.	0.022 μ F 400V J	*
C1534	QEHC2EM-225MZ	E CAP.	2.2 μ F 250V M	*
△ C1535	QFZ0119-624S	MPP CAP.	0.62 μ F 200V ± 3%	*
C1538	QEZ0203-107R	E CAP.	100 μ F 160V	
C1541	QETB2EM-226	E CAP.	22 μ F 250V M	*
C1542	QETB1VM-108	E CAP.	1000 μ F 35V M	*
C1544	QETC1VM-107Z	E CAP.	100 μ F 35V M	*
C1545	QFLC2AJ-103MZ	M CAP.	0.01 μ F 100V J	*
C1546	QFV71HJ-473MZ	TF CAP.	0.047 μ F 50V J	
C1573	QFLC1HK-683MZ	M CAP.	0.068 μ F 50V K	
C1574	QETCOJM-477Z	E CAP.	470 μ F 6.3V M	*
C1575	QFLC1HK-683MZ	M CAP.	0.068 μ F 50V K	
C1577	QETC1VM-476Z	E CAP.	47 μ F 35V M	*
C1578-79	QEM61HK-475MZ	E CAP.	4.7 μ F 50V K	
C1613	QETC1VM-476Z	E CAP.	47 μ F 35V M	*
C1622	QFLC1HJ-103MZ	M CAP.	0.01 μ F 50V J	*
C1624	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V J	*
C1625	QEN61HM-475Z	BP E CAP.	4.7 μ F 50V M	*
C1626	QEN61HM-105Z	BP E CAP.	1 μ F 50V M	*
C1628	QFLC1HK-473MZ	M CAP.	0.047 μ F 50V K	
C1630-31	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V J	*
C1633	QEE61CK-335BZ	TAN.CAP.	3.3 μ F 16V K	
C1634	QEE61CK-106BZ	TAN.CAP.	10 μ F 16V K	
C1639	QFLC1HK-273MZ	M CAP.	0.027 μ F 50V K	
C1641	QFLC1HK-222MZ	M CAP.	2200 p F 50V K	
C1642	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V J	*
C1644	QFLC1HK-222MZ	M CAP.	2200 p F 50V K	
C1645	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V J	*
C1651-52	QEN61HM-105Z	BP E CAP.	1 μ F 50V M	*
C1701-02	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1704	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1705	NCT03CH-181AY	CHIP CAP.	180 p F 50V J	*
C1709	NCT03CH-221AY	CHIP CAP.	220 p F 50V J	*
C1710-11	NCT03CH-390AY	CHIP CAP.	39 p F 50V J	*
C1712	NCT03CH-270AY	CHIP CAP.	27 p F 50V J	*
C1713	NCT03CH-150AY	CHIP CAP.	15 p F 50V J	*
C1714	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1716	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1717-18	NCT03CH-330AY	CHIP CAP.	33 p F 50V J	*
C1720-22	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1723	NCB21HK-102AY	CHIP CAP.	1000 p F 50V K	*
C1725	NCB21HK-102AY	CHIP CAP.	1000 p F 50V K	*
C1741	QFN31HJ-102ZZJ1	M CAP.	1000 p F 50V J	*
C1743	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
C1744	NCT03CH-681AY	CHIP CAP.	680 p F 50V J	*
C1772	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V K	*
△ C1901	QFZ9040-104N	MF CAP.	0.1 μ FAC275V M	*
△ C1902	QFZ9040-473N	MF CAP.	0.047 μ FAC275V M	*
△ C1903	QFZ9040-104N	MF CAP.	0.1 μ FAC275V M	*
△ C1904	QCZ9052-102A	C CAP.	1000 p FAC125V	*
△ C1906	QCZ9033-102A	C CAP.	1000 p FAC250V K	*
△ C1907	QCZ9033-102A	C CAP.	1000 p FAC250V K	*
△ C1908	QCZ9033-102A	C CAP.	1000 p FAC250V K	*
△ C1910	QEZ0169-477	E CAP.	470 μ F 200V M	*
C1911	QETC1VM-477Z	E CAP.	470 μ F 35V M	*
C1912	QFN31HJ-102ZZJ1	M CAP.	100 p F 50V J	*
C1913	QCZ0122-222U	C CAP.	2200 p F 2000V K	*
C1914	QCZ0122-391A	C CAP.	390 p F 2000V K	*

## AV-36850(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>C A P A C I T O R</b>				
C1918	NCB21HK-102AY	CHIP CAP.	1000 p F	50V K *
C1919	NCB21HK-472AY	CHIP CAP.	4700 p F	50V K *
C1920	QFLC1HJ-823MZ	M CAP.	0.082 μ F	50V J *
C1921-23	QCZ0132-152AZ	C CAP.	1500 p F	500V K *
C1924	QEZ0203-107R	E CAP.	100 μ F	160V *
C1934	NCB21HK-102AY	CHIP CAP.	1000 p F	50V K *
C1938	NCT03CH-471AY	CHIP CAP.	470 p F	50V J *
C1990-91	QCZ9029-103M	C CAP.	0.01 μ F	AC125V M *
<b>T R A N S F O R M E R</b>				
T1131	CELT001-209J3	C.WAVE TRANSF.		*
T1161	CELT003-109J3	S.I.F.TRANSF.		*
T1521	CE42034-002	H.DRIVE TRANSF.		*
△ T1522	QQH0016-001	H V TRANSF.		*
△ T1901	CETS084-001J8	S M T		*
<b>C O I L</b>				
L1001	CELP059-101Z	PEAKING COIL	100 μ H	*
L1102	CELP041-R22	PEAKING COIL	0.22 μ H	*
L1103	CELP041-R68	PEAKING COIL	0.68 μ H	*
L1104	CELP059-680Z	PEAKING COIL	68 μ H	*
L1131	CELP059-220Z	PEAKING COIL	22 μ H	*
L1161	CELP059-680Z	PEAKING COIL	68 μ H	*
L1162	CELP059-390Z	PEAKING COIL	39 μ H	*
L1201	CELP059-270Z	PEAKING COIL	27 μ H	*
△ L1531	CE41663-00B	LINEARITY COIL		*
△ L1532	CELC052-821	CHOKE COIL		*
△ L1591	CELC901-034J6	HEATER CHOKE		*
L1701	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
L1702	CELP058-100Z	PEAKING COIL	10 μ H	*
L1771	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
L1921	CELC058-820Z	CHOKE COIL		*
L1922	CELC058-220Z	CHOKE COIL		*
<b>D I O D E</b>				
D1001	MTZJ36(A)-T2	ZENER DIODE		*
D1221	MTZJ5.1(B)-T2	ZENER DIODE		*
D1231-34	1SS133-T2	SI.DIODE		*
D1421	1N4003-T2	SI.DIODE		*
D1422	MTZJ75-T2	ZENER DIODE		*
D1511	MTZJ3.3(A)-T2	ZENER DIODE		*
△ D1531	RH3G-C1	SI.DIODE		*
△ D1532	RU3AM-LFC4	SI.DIODE		*
D1533	RGP10J(C1)-T3	SI.DIODE		*
D1540	MTZJ36(A)-T2	ZENER DIODE		*
D1541	RH1S-T3	SI.DIODE		*
D1542	RGP10J(C1)-T3	SI.DIODE		*
D1544	1SS81-T2	SI.DIODE		*
D1546	1SR124-400A-T2	SI.DIODE		*
D1549	MTZJ9.1(B)-T2	ZENER DIODE		*
△ D1551	MTZJ7.5S-T2	ZENER DIODE		*
D1560	1SS133-T2	SI.DIODE		*
D1601-03	1SS133-T2	SI.DIODE		*
D1693-94	MTZJ9.1(C)-T2	ZENER DIODE		*
D1702-04	1SS133-T2	SI.DIODE		*
D1741-42	1SS133-T2	SI.DIODE		*
D1771-73	1SS133-T2	SI.DIODE		*
D1803	1SS133-T2	SI.DIODE		*
D1804	MTZJ5.1(B)-T2	ZENER DIODE		*
D1805	1SS133-T2	SI.DIODE		*
D1809	MTZJ5.1(B)-T2	ZENER DIODE		*
D1810	MTZJ12(C)-T2	ZENER DIODE		*
△ D1901	D3SBA60-C1	BRIDGE DIODE		*
△ D1902	RGP10J(C1)-T3	SI.DIODE		*
D1903-04	1SS133-T2	SI.DIODE		*
D1909	MTZJ15(A)-T2	ZENER DIODE		*

## AV-36850(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>D I O D E</b>				
D1910	RGP10J(C1)-T3	SI.DIODE		*
D1911	1SS133-T2	SI.DIODE		*
D1912	MTZJ15(A)-T2	ZENER DIODE		*
D1913	RGP10J(C1)-T3	SI.DIODE		*
D1921	RU30A-C1	SI.DIODE		*
D1922	RU3YX-LFC4	SI.DIODE		*
D1923	ECP10D-C1	SI.DIODE		*
D1926-27	1SS133-T2	SI.DIODE		*
D1931	1SS133-T2	SI.DIODE		*
D1933	1SS133-T2	SI.DIODE		*
D1941	MTZJ11(A)-T2	ZENER DIODE		*
D1951	MTZJ7.5S-T2	ZENER DIODE		*
<b>T R A N S I S T O R</b>				
Q1101	2SC5083(L-P)-T	SI.TRANSISTOR		*
Q1131-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1161	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1203	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1204-05	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1231-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1521	2SC4212-C1	SI.TRANSISTOR		*
△ Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT	*
Q1541	2SA933S(QR)-T	SI.TRANSISTOR		*
△ Q1542	2SC2785(JH)-T	SI.TRANSISTOR		*
Q1543-44	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1551	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1552	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1553	2SD1408(OY)-LB	SI.TRANSISTOR		*
Q1601	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1602	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1603	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1604	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1671-72	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1683-86	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1701	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1741	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1742	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1743	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1911	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1921	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1923	2SA1020(Y)-T	SI.TRANSISTOR		*
Q1924	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1928	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1942-43	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1944	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1951	2SA949(Y)C1-T	SI.TRANSISTOR		*
<b>I C</b>				
IC1001	KIA78L05BP-Y	I.C.(MONO-ANA)		*
IC1101	BA17809T	I.C.(MONO-ANA)		*
IC1201	TA1242N	I.C.(MONO-ANA)		*
△ IC1421	LA7832	I.C.		*
△ IC1601	LA4485	I.C.(MONO-ANA)		*
IC1651	UPC1851ACU	I.C.		*
IC1652	BA15218N	I.C.(MONO-ANA)		*
IC1653	TC4066BP	I.C.(DIGI-MOS)		*
IC1202	TC4066BP	I.C.(DIGI-MOS)		*
IC1701	MN1874876JZX1	I.C.		*
IC1702	AT24C02-32850	I.C.	(SERVICE)	*
IC1703	MN1381-Q-Y	I.C.(MONO-ANA)		*
IC1771	KIA78L05BP-Y	I.C.(MONO-ANA)		*
△ IC1901	STR-F6515	I.C.(HYBRID)		*
△ IC1941	SE135N	I.C.(HYBRID)		*
<b>O T H E R S</b>				
CF1001	FTP47.25MF	CERAMIC FILTER		*

AV-36850(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>O T H E R S</b>				
CF1131	CE41505-001	CERAMIC FILTER		*
CF1161	SFSH4.5MCB	CERAMIC FILTER		*
CF1501	CSB503F30-T2	CER. RESONATOR		*
CF1701	FCR12.0MZS	CER. RESONATOR		*
△ F1901	QMF0007-5R0J1	FUSE	5.0A	*
K1421	QQR0582-001Z	BEADS CORE		*
K1901	CE41433-001Z	BEADS CORE		*
K1903	CE41433-001Z	BEADS CORE		*
K1921	CE41433-001Z	BEADS CORE		*
△ LF1901	CELF001-001J1	LINE FILTER		*
△ LF1902	CE42335-001J1	LINE FILTER		*
△ PC1901	TLP621(B)	I.C.(PH.COUPLER)		*
△ PC1902	TLP621(B)	I.C.(PH.COUPLER)		*
△ RY1901	CESK028-001	RELAY		*
S1421	QSL6A13-C01	LEVER SWITCH	V.CENTER SW	*
SF1101	CE42604-201	SAW FILTER		
△ TH1501	CEKP004-002	P.THERMISTOR		
△ TH1901	CEKP007-002	P.THERMISTOR		
△ TU1001	CEEM270-A02	TUNER		*
△ VA1901	ERZV10V361CS	VARISTOR		*
X1301	QAX0310-001Z	X-TAL		*
Y1201	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*

**CRT SOCKET PW BOARD ASS'Y ( SFK-3003A-M2 )**

△ Symbol No.	Part No.	Part Name	Description	Local
<b>R E S I S T O R</b>				
R3360-62	QRZ0111-152	C R	1.5k Ω 1/2W	*
R3363-65	QRG029J-103	OM R	10k Ω 2W J	*
<b>C A P A C I T O R</b>				
C3354-55	NCS21HJ-331AY	CER.CAP.-M	330 pF 50V J	*
C3356	NCS21HJ-391AY	CER.CAP.-M	330 pF 50V J	*
△ C3382	QCZ0121-102A	C CAP.	1000 pF 3kV Z	*
<b>C O I L</b>				
L3381	CELP055-101Z	PEAKING COIL	100 μH	*
<b>T R A N S I S T O R</b>				
Q3351-53	2SC4544-C1	SI.TRANSISTOR		*
<b>O T H E R S</b>				
△ SK3351	CE42535-001J1	C.R.T.SOCKET		*

AV-36850(US&amp;CA)

## FRONT CONTROL PW BOARD ASS'Y ( SFK-4003A-M2 )

△ Symbol	No.	Part No.	Part Name	Description	Local
D I O D E					
D4701		GL2PR6	L.E.D.(RED)		*
T R A N S I S T O R					
Q4701-02		DTA124EKA-X	DIGI.TRANSISTOR		*
I C					
IC4841		PIC-21043SR	IR DETECT UNIT		*
O T H E R S					
S4702		CM46978-A01-H	L.E.D.HOLDER		*
S4703		QSP1A11-C19Z	PUSH SWITCH	MENU	*
S4704		QSP1A11-C19Z	PUSH SWITCH	CH -	*
S4705		QSP1A11-C19Z	PUSH SWITCH	CH +	*
S4706		QSP1A11-C19Z	PUSH SWITCH	VOL -	*
S4707		QSP1A11-C19Z	PUSH SWITCH	VOL +	*
			PUSH SWITCH	POWER	*

## AV SELECTOR PW BOARD ASS'Y ( SFK-8004A-M2 )

△ Symbol	No.	Part No.	Part Name	Description	Local
V A R I A B L E   R E S I S T O R					
R8123		QVPA603-473AZ	V R(NOISE VR)	47kΩ B	
R E S I S T O R					
R8005		QRD14CJ-5R6SX	C R	5.6 Ω 1/4W J	*
R8106		QRD12CJ-101SX	C R	100 Ω 1/2W J	*
R8109		NRVA02D-2200NY	MF R	220 Ω 1/10W ± 0.5%	*
C A P A C I T O R					
C8005		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8101-03		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8104		NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8106		NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8107		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8108		NCS21HJ-101AY	CER.CAP.-M	100 pF 50V J	*
C8109-10		QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	*
C8111		NCT03CH-390AY	CHIP CAP.	39 pF 50V J	*
C8112		NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8115		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8118		QFV71HJ-474MZ	TF CAP.	0.47 μF 50V J	*
C8161		QFLC1HJ-104MZ	M CAP.	0.1 μF 50V J	*
C8205		NCT03CH-330AY	CHIP CAP.	33 pF 50V J	*
C8302		QFLC1HJ-103MZ	M CAP.	0.01 μF 50V J	*
C8303		NCT03CH-680AY	CHIP CAP.	68 pF 50V J	*
C8304		NCT03CH-271AY	CHIP CAP.	270 pF 50V J	*
C8305		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8316		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8701		NCT03CH-100AY	CHIP CAP.	10 pF 50V J	*
C8702-03		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8704		NCB21HK-333AY	CHIP CAP.	0.033 μF 50V K	*
C8706		QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	*
C8708		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8710		NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*

## AV-36850(US&amp;CA)

△ Symbol No.	Part No.	Part Name	Description	Local
<b>C A P A C I T O R</b>				
C8711	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8712-13	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8715	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8716	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8717-18	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8720	QEN61HM-335Z	BP E CAP.	3.3 μF	50V M *
C8724	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8726	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8727	NCT03CH-680AY	CHIP CAP.	68 pF	50V J *
C8730	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8731	NCT03CH-151AY	CHIP CAP.	150 pF	50V J *
C8733-34	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8735-36	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8737	QFLC1HJ-393MZ	M CAP.	0.039 μF	50V J *
C8738	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8739	QFV71HJ-334MZ	TF CAP.	0.33 μF	50V J *
C8741	NCT03CH-120AY	CHIP CAP.	12 pF	50V J *
C8746	QFN31HJ-102ZZ1	M CAP.	100 pF	50V J *
C8747	NCB21HK-153AY	CHIP CAP.	0.015 μF	50V K *
C8829	QEN61HM-106Z	BP E CAP.	10 μF	50V M *
C8832	QFLC1HJ-103MZ	M CAP.	0.01 μF	50V J *
C8842	QFLC1HJ-103MZ	M CAP.	0.01 μF	50V J *
C8846	QFLC1HJ-223MZ	M CAP.	0.022 μF	50V J *
<b>C O I L</b>				
L8003	CELP059-150Z	PEAKING COIL	15 μH	*
L8101	CELP041-R22	PEAKING COIL	0.22 μH	*
L8103	CE42452-003	COIL		*
L8104	CELP055-220Z	PEAKING COIL	22 μH	*
L8105	CELP059-100Z	PEAKING COIL	10 μH	*
L8106	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8202	CELP059-220Z	PEAKING COIL	22 μH	*
L8301	CELP059-150Z	PEAKING COIL	15 μH	*
L8702-03	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8704	CELP055-2R2Z	PEAKING COIL	2.2 μH	*
L8705	CELP055-1R5Z	PEAKING COIL	1.5 μH	*
L8706	CELP059-330Z	PEAKING COIL	33 μH	*
L8801-02	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
<b>D I O D E</b>				
D8311-13	1SS133-T2	SI.DIODE		*
D8701-03	MTZJ5.6(B)-T2	ZENER DIODE		*
D8705-06	1SS133-T2	SI.DIODE		*
D8811-22	MTZJ9.1(C)-T2	ZENER DIODE		*
<b>T R A N S I S T O R</b>				
Q8101	2SC5083(L-P)-T	SI.TRANSISTOR		*
Q8102	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8202	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8203	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8204	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8301-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8305-06	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8703-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8801-02	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8803	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8804-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8851-53	DTC124EKA-X	DIGI.TRANSISTOR		*
<b>I C</b>				
IC8001	KIA7805PI	I.C.(MONO-ANA)		*
IC8101	LA7583	I.C.(MONO-ANA)		*
IC8701	M65617SP	I C		*
IC8703	BA033T	I C		*
IC8801	BA7644AN	OP AMP IC		*
IC8802	BA7644AN	I.C.(MONO-ANA)		*

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△ Symbol No.	Part No.	Part Name	Description	Local
I C				
<b>IC8803</b> TC4066BP I.C.(DIGI-MOS) *				
<b>O T H E R S</b>				
	CM36337-A01-H	SHIELD COVER		*
	CM36424-001	SHIELD BOTTOM		*
CF8102	FCR5.71M2SF3	CER.RESONATOR		*
CF8103	CE41505-001	CERAMIC FILTER		*
CM8201	CE42599-001	COMB FILTER MOD		*
DL8201	CE42464-001	BPF&DL MODULE		*
J8801	QMCC004-C01	MINI DIN JACK		*
J8802	QNN0083-001	PIN JACK		*
J8803-04	QMS3003-C01	JACK		*
SF8101	CE42589-201	SAW FILTER		*
△ TU8001	CEEM270-A02	TUNER		*
X8701	CE40405-001	CRYSTAL(4FSC)		*

## PRINTED WIRING BOARD PARTS LIST

AV-36870(US&amp;CA)

## MAIN PW BOARD ASS'Y ( SFK-1007A-M2 )

△ Symbol No.	Part No.	Part Name	Description	Local
V A R I A B L E   R E S I S T O R				
R1579	QVPE611-203HZ	V R(SIDEPIN CORRECT)	20k Ω B	*
R1581	QVPE611-502HZ	V R(H.WIDTH)	5k Ω B	*
R E S I S T O R				
R1001	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W	J *
R1110	QRG029J-220A	OM R	22 Ω 2W	J *
R1423	QRX029J-1R2A	MF R	1.2 Ω 2W	J *
R1524-25	QRG029J-152A	OM R	1.5k Ω 2W	J *
R1533	QRG039J-103A	OM R	10k Ω 3W	J *
R1541	QRD129J-150S	C R	15 Ω 1/2W	J *
R1542	QRX019J-1R2S	MF R	1.2 Ω 1W	J *
R1543	QRG039J-223A	OM R	22k Ω 3W	J *
R1544	QRD129J-4R7S	C R	4.7 Ω 1/2W	J *
△ R1556	QRV141F-7501AY	MF R	7.5k Ω 1/4W	F *
△ R1557	QRV141F-2491AY	MF R	2.49k Ω 1/4W	F *
R1588	QRG039J-100A	OM R	10 Ω 3W	J *
R1605	QRX029J-R82A	MF R	0.82 Ω 2W	J *
R1637	NRVA02D-1502NY	MF R	15k Ω 1/10W ± 0.5%	*
R1639	NRVA02D-1501NY	MF R	1.5k Ω 1/10W ± 0.5%	*
R1771	QRG019J-820S	OM R	82 Ω 1W	J *
△ R1901	QRF074K-R47	UNF R	0.47 Ω 7W	K *
R1904-05	QRX029J-R22A	MF R	0.22 Ω 2W	J *
R1923	QRX039J-1R0A	MF R	1 Ω 3W	J *
R1924	QRG019J-331S	OM R	330 Ω 1W	J *
R1926	QRX029J-1R0A	MF R	1 Ω 2W	J *
R1951	QRX029J-1R2A	MF R	1.2 Ω 2W	J *
R1952	QRX029J-1R0A	MF R	1 Ω 2W	J *
△ R1998	QRZ0111-275U	C R	2.7M Ω 1/2W	*
C A P A C I T O R				
C1006	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1011	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1102	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1104-05	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1106	NCT03CH-560AY	CHIP CAP.	56 p F 50V	J *
C1107	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1110-11	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1131	QFV71HJ-154MZ	TF CAP.	0.15 μ F 50V	J *
C1132	QFLC1HK-152MZ	M CAP.	1500 p F 50V	K *
C1134	NCB21HK-332AY	CHIP CAP.	3300 p F 50V	K *
C1135	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1139	NCB21HK-223AY	CHIP CAP.	0.022 μ F 50V	K *
C1162	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1163	NCT03CH-220AY	CHIP CAP.	22 p F 50V	J *
C1164-65	NCT03CH-470AY	CHIP CAP.	47 p F 50V	J *
C1166	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1168-70	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1201	QEN61HM-335Z	BP E CAP.	3.3 μ F 50V	M *
C1205	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V	J *
C1208	NCT03CH-680AY	CHIP CAP.	68 p F 50V	J *
C1226	NCT03CH-681AY	CHIP CAP.	680 p F 50V	J *
C1228	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V	J *
C1301	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1302	NCT03CH-100AY	CHIP CAP.	10 p F 50V	J *
C1303	QFLC1HK-223MZ	M CAP.	0.022 μ F 50V	K *
C1306	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1402	QEE61CK-225BZ	TAN.CAP.	2.2 μ F 16V	K *
C1403	NCB21HK-102AY	CHIP CAP.	1000 p F 50V	K *
C1421	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K *
C1424	QETC1VM-107Z	E CAP.	100 μ F 35V	M *
C1425	QETC1VM-477Z	E CAP.	470 μ F 35V	M *

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△ Symbol No.	Part No.	Part Name	Description			Loca
<b>C A P A C I T O R</b>						
C1426	QFLC2AK-563MZ	M CAP.	0.056 $\mu$ F	100V	K	*
C1428	QFV71HJ-474MZ	TF CAP.	0.47 $\mu$ F	50V	J	*
C1429	QFV71HJ-224MZ	TF CAP.	0.22 $\mu$ F	50V	J	*
C1503	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1523	QETC2CM-105Z	E CAP.	1 $\mu$ F	160V	M	*
△ C1531	QFZ0117-3501S	MPP CAP.	3500 pF	1.4kVH $\pm$ 2.5%		*
△ C1532	QFZ0117-1302S	MPP CAP.	0.013 $\mu$ F	1.4kVH $\pm$ 2.5%		*
△ C1533	QFP32GJ-223M	PP CAP.	0.022 $\mu$ F	400V	J	*
C1534	QEHC2EM-225MZ	E CAP.	2.2 $\mu$ F	250V	M	*
△ C1535	QFZ0119-624S	MPP CAP.	0.62 $\mu$ F	200V	$\pm$ 3%	*
C1538	QEZO203-107R	E CAP.	100 $\mu$ F	160V		
C1541	QETB2EM-226	E CAP.	22 $\mu$ F	250V	M	*
C1542	QETB1VM-108	E CAP.	1000 $\mu$ F	35V	M	*
C1544	QETC1VM-107Z	E CAP.	100 $\mu$ F	35V	M	*
C1545	QFLC2AJ-103MZ	M CAP.	0.01 $\mu$ F	100V	J	*
C1546	QFV71HJ-473MZ	TF CAP.	0.047 $\mu$ F	50V	J	
C1573	QFLC1HK-683MZ	M CAP.	0.068 $\mu$ F	50V	K	
C1574	QETCOJM-477Z	E CAP.	470 $\mu$ F	6.3V	M	*
C1575	QFLC1HK-683MZ	M CAP.	0.068 $\mu$ F	50V	K	
C1577	QETC1VM-476Z	E CAP.	47 $\mu$ F	35V	M	*
C1578-79	QEM61HK-475MZ	E CAP.	4.7 $\mu$ F	50V	K	
C1613	QETC1VM-476Z	E CAP.	47 $\mu$ F	35V	M	*
C1622	QFLC1HJ-103MZ	M CAP.	0.01 $\mu$ F	50V	J	*
C1624	QFLC1HJ-104MZ	M CAP.	0.1 $\mu$ F	50V	J	*
C1625	QEN61HM-475Z	BP E CAP.	4.7 $\mu$ F	50V	M	*
C1626	QEN61HM-105Z	BP E CAP.	1 $\mu$ F	50V	M	*
C1628	QFLC1HK-473MZ	M CAP.	0.047 $\mu$ F	50V	K	
C1630-31	QFLC1HJ-104MZ	M CAP.	0.1 $\mu$ F	50V	J	*
C1633	QEE61CK-335BZ	TAN.CAP.	3.3 $\mu$ F	16V	K	
C1634	QEE61CK-106BZ	TAN.CAP.	10 $\mu$ F	16V	K	
C1639	QFLC1HK-273MZ	M CAP.	0.027 $\mu$ F	50V	K	
C1641	QFLC1HK-222MZ	M CAP.	2200 pF	50V	K	
C1642	QFLC1HJ-104MZ	M CAP.	0.1 $\mu$ F	50V	J	*
C1644	QFLC1HK-222MZ	M CAP.	2200 pF	50V	K	
C1645	QFLC1HJ-104MZ	M CAP.	0.1 $\mu$ F	50V	J	*
C1651-52	QEN61HM-105Z	BP E CAP.	1 $\mu$ F	50V	M	*
C1701-02	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1704	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1705	NCT03CH-181AY	CHIP CAP.	180 pF	50V	J	*
C1709	NCT03CH-221AY	CHIP CAP.	220 pF	50V	J	*
C1710-11	NCT03CH-390AY	CHIP CAP.	39 pF	50V	J	*
C1712	NCT03CH-270AY	CHIP CAP.	27 pF	50V	J	*
C1713	NCT03CH-150AY	CHIP CAP.	15 pF	50V	J	*
C1714	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1716	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1717-18	NCT03CH-330AY	CHIP CAP.	33 pF	50V	J	*
C1720-22	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1723	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	
C1725	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	*
C1741	QFN31HJ-102ZJ1	M CAP.	1000 pF	50V	J	*
C1743	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
C1744	NCT03CH-681AY	CHIP CAP.	680 pF	50V	J	*
C1772	NCB21HK-103AY	CHIP CAP.	0.01 $\mu$ F	50V	K	*
△ C1901	QFZ9040-104N	MF CAP.	0.1 $\mu$ FAC275V		M	*
△ C1902	QFZ9040-473N	MF CAP.	0.047 $\mu$ FAC275V		M	*
△ C1903	QFZ9040-104N	MF CAP.	0.1 $\mu$ FAC275V		M	*
△ C1904	QCZ9052-102A	C CAP.	1000 pF	FAC125V		*
△ C1906	QCZ9033-102A	C CAP.	1000 pF	FAC250V	K	*
△ C1907	QCZ9033-102A	C CAP.	1000 pF	FAC250V	K	*
△ C1908	QCZ9033-102A	C CAP.	1000 pF	FAC250V	K	*
△ C1910	QEZO169-477	E CAP.	470 $\mu$ F	200V	M	*
C1911	QETC1VM-477Z	E CAP.	470 $\mu$ F	35V	M	*
C1912	QFN31HJ-102ZJ1	M CAP.	100 pF	50V	J	*

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△ Symbol No.	Part No.	Part Name	Description	Local
<b>C A P A C I T O R</b>				
C1913	QCZ0122-222U	C CAP.	2200 p F 2000V	K *
C1914	QCZ0122-391A	C CAP.	390 p F 2000V	K *
C1918	NCB21HK-102AY	CHIP CAP.	1000 p F 50V	K *
C1919	NCB21HK-472AY	CHIP CAP.	4700 p F 50V	K *
C1920	QFLC1HJ-823MZ	M CAP.	0.082 μF 50V	J *
C1921-23	QCZ0132-152AZ	C CAP.	1500 p F 500V	K *
C1924	QEZ0203-107R	E CAP.	100 μF 160V	
C1934	NCB21HK-102AY	CHIP CAP.	1000 p F 50V	K
C1938	NCT03CH-471AY	CHIP CAP.	470 p F 50V	J *
C1990-91	QCZ9029-103M	C CAP.	0.01 μF AC125V	M *
<b>T R A N S F O R M E R</b>				
T1131	CELT001-209J3	C.WAVE TRANSF.		*
T1161	CELT003-109J3	S.I.F.TRANSF.		*
T1521	CE42034-002	H.DRIVE TRANSF.		*
△ T1522	QQH0016-001	H V TRANSF.		*
△ T1901	CETS084-001J8	S M T		*
<b>C O I L</b>				
L1001	CELP059-101Z	PEAKING COIL	100 μH	*
L1102	CELP041-R22	PEAKING COIL	0.22 μH	*
L1103	CELP041-R68	PEAKING COIL	0.68 μH	*
L1104	CELP059-680Z	PEAKING COIL	68 μH	*
L1131	CELP059-220Z	PEAKING COIL	22 μH	*
L1161	CELP059-680Z	PEAKING COIL	68 μH	*
L1162	CELP059-390Z	PEAKING COIL	39 μH	*
L1201	CELP059-270Z	PEAKING COIL	27 μH	*
△ L1531	CE41663-00B	LINEARITY COIL		*
△ L1532	CELC052-821	CHOKE COIL		*
△ L1591	CELC901-034J6	HEATER CHOKE		*
L1701	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L1702	CELP058-100Z	PEAKING COIL	10 μH	*
L1707	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L1771	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L1921	CELC058-820Z	CHOKE COIL		*
L1922	CELC058-220Z	CHOKE COIL		*
<b>D I O D E</b>				
D1001	MTZJ36(A)-T2	ZENER DIODE		*
D1221	MTZJ5.1(B)-T2	ZENER DIODE		*
D1231-34	1SS133-T2	SI.DIODE		*
D1421	1N4003-T2	SI.DIODE		*
D1422	MTZJ75-T2	ZENER DIODE		*
D1511	MTZJ3.3(A)-T2	ZENER DIODE		*
△ D1531	RH3G-C1	SI.DIODE		*
△ D1532	RU3AM-LFC4	SI.DIODE		*
D1533	RGP10J(C1)-T3	SI.DIODE		*
D1540	MTZJ36(A)-T2	ZENER DIODE		*
D1541	RH1S-T3	SI.DIODE		*
D1542	RGP10J(C1)-T3	SI.DIODE		*
D1544	1SS81-T2	SI.DIODE		*
D1546	1SR124-400A-T2	SI.DIODE		*
D1549	MTZJ9.1(B)-T2	ZENER DIODE		*
△ D1551	MTZJ7.5S-T2	ZENER DIODE		*
D1560	1SS133-T2	SI.DIODE		*
D1601-03	1SS133-T2	SI.DIODE		*
D1693-94	MTZJ9.1(C)-T2	ZENER DIODE		*
D1702-04	1SS133-T2	SI.DIODE		*
D1741-42	1SS133-T2	SI.DIODE		*
D1771-73	1SS133-T2	SI.DIODE		*
D1803	1SS133-T2	SI.DIODE		*
D1804	MTZJ5.1(B)-T2	ZENER DIODE		*
D1805	1SS133-T2	SI.DIODE		*
D1809	MTZJ5.1(B)-T2	ZENER DIODE		*

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△ Symbol No.	Part No.	Part Name	Description	Local
D I O D E				
D1810	MTZJ12(C)-T2	ZENER DIODE		*
△ D1901	D3SBA60-C1	BRIDGE DIODE		*
△ D1902	RGP10J(C1)-T3	SI.DIODE		*
D1903-04	ISS133-T2	SI.DIODE		*
D1909	MTZJ15(A)-T2	ZENER DIODE		*
D1910	RGP10J(C1)-T3	SI.DIODE		*
D1911	ISS133-T2	SI.DIODE		*
D1912	MTZJ15(A)-T2	ZENER DIODE		*
D1913	RGP10J(C1)-T3	SI.DIODE		*
D1921	RU30A-C1	SI.DIODE		*
D1922	RU3YX-LFC4	SI.DIODE		*
D1923	EGP10D-C1	SI.DIODE		*
D1926-27	ISS133-T2	SI.DIODE		*
D1931	ISS133-T2	SI.DIODE		*
D1933	ISS133-T2	SI.DIODE		*
D1941	MTZJ11(A)-T2	ZENER DIODE		*
D1951	MTZJ7.5S-T2	ZENER DIODE		*
T R A N S I S T O R				
Q1101	2SC5083(L-P)-T	SI.TRANSISTOR		*
Q1131-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1161	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1201-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1204-05	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1231-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1521	2SC4212-C1	SI.TRANSISTOR		*
△ Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT	*
Q1541	2SA933S(QR)-T	SI.TRANSISTOR		*
△ Q1542	2SC2785(JH)-T	SI.TRANSISTOR		*
Q1543-44	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1551	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1552	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1553	2SD1408(OY)-LB	SI.TRANSISTOR		*
Q1601	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1602	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1603	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1604	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1671-72	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1683-86	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1701	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1741	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1742	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1743	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1911	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q1921	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1923	2SA1020(Y)-T	SI.TRANSISTOR		*
Q1924	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1928	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1942-43	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q1944	DTC124EKA-X	DIGI.TRANSISTOR		*
Q1951	2SA949(Y)C1-T	SI.TRANSISTOR		*
I C				
IC1001	KIA78L05BP-Y	I.C.(MONO-ANA)		*
IC1101	BA17809T	I.C.(MONO-ANA)		*
IC1201	TA1242N	I.C.(MONO-ANA)		*
△ IC1421	LA7832	I.C		*
△ IC1601	LA4485	I.C.(MONO-ANA)		*
IC1651	UPC1851ACU	I.C		*
IC1652	BA15218N	I.C.(MONO-ANA)		*
IC1653	TC4066BP	I.C.(DIGI-MOS)		*
IC1202	TC4066BP	I.C.(DIGI-MOS)		*
IC1701	MN1874876JZX1	I.C		*
IC1702	AT24C02-32850	I.C.	(SERVICE)	*
IC1703	MN1381-Q-Y	I.C.(MONO-ANA)		*

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△ Symbol No.	Part No.	Part Name	Description	Local
I C				
△ IC1771	KIA78L05BP-Y	I.C.(MONO-ANA)		*
△ IC1901	STR-F6515	I.C.(HYBRID)		
△ IC1941	SE135N	I.C.(HYBRID)		
<b>O T H E R S</b>				
CF1001	FTP47.25MF	CERAMIC FILTER		*
CF1131	CE41505-001	CERAMIC FILTER		*
CF1161	SFSH4.5MBC	CERAMIC FILTER		*
CF1501	CSB503F30-T2	CER. RESONATOR		*
CF1701	FCR12.0M2S	CER. RESONATOR		*
△ F1901	QMF0007-5R0J1	FUSE	5.0A	*
K1421	QQR0582-001Z	BEADS CORE		*
K1901	CE41433-001Z	BEADS CORE		*
K1903	CE41433-001Z	BEADS CORE		*
K1921	CE41433-001Z	BEADS CORE		*
△ LF1901	CELF001-001J1	LINE FILTER		*
△ LF1902	CE42335-001J1	LINE FILTER		*
△ PC1901	TLP621(B)	I.C.(PH.COUPLER)		*
△ PC1902	TLP621(B)	I.C.(PH.COUPLER)		*
△ RY1901	CESK028-001	RELAY		*
S1421	QSL6A13-C01	LEVER SWITCH	V.CENTER SW	*
SF1101	CE42604-201	SAW FILTER		
△ TH1501	CEKP004-002	P.THERMISTOR		
△ TH1901	CEKP007-002	P.THERMISTOR		
△ TU1001	CEEM270-A02	TUNER		*
△ VA1901	ERZV10V361CS	VARISTOR		*
X1301	QAX0310-001Z	CRYSTAL		*
Y1201	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*

**CRT SOCKET PW BOARD ASS'Y ( SFK-3003A-M2 )**

△ Symbol No.	Part No.	Part Name	Description	Local
<b>R E S I S T O R</b>				
R3360-62	QRZ0111-152	C R	1.5k Ω 1/2W K	*
R3363-65	QRG029J-103	OM R	10k Ω 2W J	*
<b>C A P A C I T O R</b>				
C3354-55	NCS21HJ-331AY	CER.CAP.-M	330 pF 50V J	*
C3356	NCS21HJ-391AY	CER.CAP.-M	330 pF 50V J	*
△ C3382	QCZ0121-102A	C CAP.	1000 pF 3kV Z	*
<b>C O I L</b>				
L3381	CELP055-101Z	PEAKING COIL	100 μH	*
<b>T R A N S I S T O R</b>				
Q3351-53	2SC4544-C1	SI.TRANSISTOR		*
<b>O T H E R S</b>				
△ SK3351	CE42535-001J1	C.R.T.SOCKET		*

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## FRONT CONTROL PW BOARD ASS'Y ( SFK-4003A-M2 )

△ Symbol No.	Part No.	Part Name	Description	Local
D I O D E D4701	GL2PR6	L.E.D.(RED)		*
T R A N S I S T O R Q4701-02	DTA124EKA-X	DIGI.TRANSISTOR		*
I C IC4841	PIC-21043SR	IR DETECT UNIT		*
O T H E R S				
S4702	CM46978-A01-H	L.E.D.HOLDER		*
S4703	QSP1A11-C19Z	PUSH SWITCH	MENU	*
S4704	QSP1A11-C19Z	PUSH SWITCH	CH -	*
S4705	QSP1A11-C19Z	PUSH SWITCH	CH +	*
S4706	QSP1A11-C19Z	PUSH SWITCH	VOL -	*
S4707	QSP1A11-C19Z	PUSH SWITCH	VOL +	*
	QSP1A11-C19Z	PUSH SWITCH	POWER	*

## AV SELECTOR PW BOARD ASS'Y ( SFK-8001A-M2 )

△ Symbol No.	Part No.	Part Name	Description	Local
V A R I A B L E   R E S I S T O R R8123	QVPA603-473AZ	V R(NOISE VR)	47kΩ B	
R E S I S T O R				
R8005	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W J	*
R8106	QRD12CJ-101SX	C R	100 Ω 1/2W J	*
R8109	NRVA02D-2200NY	MF R	220 Ω 1/10W ±0.5%	*
C A P A C I T O R				
C8005	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8101-03	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8104	NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8106	NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8107	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8108	NCS21HJ-101AY	CER.CAP.-M	100 pF 50V J	*
C8109-10	QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	*
C8111	NCT03CH-390AY	CHIP CAP.	39 pF 50V J	*
C8112	NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	*
C8115	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8118	QFV71HJ-474MZ	TF CAP.	0.47 μF 50V J	*
C8161	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V J	*
C8205	NCT03CH-330AY	CHIP CAP.	33 pF 50V J	*
C8302	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V J	*
C8303	NCT03CH-680AY	CHIP CAP.	68 pF 50V J	*
C8304	NCT03CH-271AY	CHIP CAP.	270 pF 50V J	*
C8305	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8316	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8701	NCT03CH-100AY	CHIP CAP.	10 pF 50V J	*
C8702-03	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	*
C8704	NCB21HK-333AY	CHIP CAP.	0.033 μF 50V K	*

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△ Symbol No.	Part No.	Part Name	Description	Loca
<b>C A P A C I T O R</b>				
C8706	QFV71HJ-224MZ	TF CAP.	0.22 μF	50V J *
C8708	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8710	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8711	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8712-13	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8715	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8716	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8717-18	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8720	QEN61HM-335Z	BP E CAP.	3.3 μF	50V M *
C8724	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8726	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8727	NCT03CH-680AY	CHIP CAP.	68 pF	50V J *
C8730	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8731	NCT03CH-151AY	CHIP CAP.	150 pF	50V J *
C8733-34	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V K *
C8735-36	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8737	QFLC1HJ-393MZ	M CAP.	0.039 μF	50V J *
C8738	QFLC1HJ-104MZ	M CAP.	0.1 μF	50V J *
C8739	QFV71HJ-334MZ	TF CAP.	0.33 μF	50V J *
C8741	NCT03CH-120AY	CHIP CAP.	12 pF	50V J *
C8746	QFN31HJ-102ZZ1	M CAP.	100 pF	50V J *
C8747	NCB21HK-153AY	CHIP CAP.	0.015 μF	50V K *
C8829	QEN61HM-106Z	BP E CAP.	10 μF	50V M *
C8832	QFLC1HJ-103MZ	M CAP.	0.01 μF	50V J *
C8842	QFLC1HJ-103MZ	M CAP.	0.01 μF	50V J *
C8846	QFLC1HJ-223MZ	M CAP.	0.022 μF	50V J *
<b>C O I L</b>				
L8003	CELP059-150Z	PEAKING COIL	15 μH	*
L8101	CELP041-R22	PEAKING COIL	0.22 μH	*
L8103	CE42452-003	COIL		*
L8104	CELP055-220Z	PEAKING COIL	22 μH	*
L8105	CELP059-100Z	PEAKING COIL	10 μH	*
L8106	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8202	CELP059-220Z	PEAKING COIL	22 μH	*
L8301	CELP059-150Z	PEAKING COIL	15 μH	*
L8702-03	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8704	CELP055-2R2Z	PEAKING COIL	2.2 μH	*
L8705	CELP055-1R5Z	PEAKING COIL	1.5 μH	*
L8706	CELP059-330Z	PEAKING COIL	33 μH	*
L8801-02	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
<b>D I O D E</b>				
D8311-13	1SS133-T2	SI.DIODE		*
D8701-03	MTZJ5.6(B)-T2	ZENER DIODE		*
D8705-06	1SS133-T2	SI.DIODE		*
D8811-22	MTZJ9.1(C)-T2	ZENER DIODE		*
<b>T R A N S I S T O R</b>				
Q8101	2SC5083(L-P)-T	SI.TRANSISTOR		*
Q8102	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8202	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8203	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8204	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8301-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8305-06	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8703-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8801-02	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8803	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8804-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8851-53	DTC124EKA-X	DIGI.TRANSISTOR		*
<b>I C</b>				
IC8001	KIA7805PI	I.C.(MONO-ANA)		*
IC8101	LA7583	I.C.(MONO-ANA)		*

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△ Symbol No.	Part No.	Part Name	Description	Local
I C				
IC8701	M65617SP	I C		*
IC8703	BA033T	I C		*
IC8801	BA7644AN	OP AMP IC		*
IC8802	BA7644AN	I.C.(MONO-ANA)		*
IC8803	TC4066BP	I.C.(DIGI-MOS)		*
<b>O T H E R S</b>				
	CM36337-A01-H	SHIELD COVER		*
	CM36424-001	SHIELD BOTTOM		*
CF8102	FCR5.71M2SF3	CER.RESONATOR		*
CF8103	CE41505-001	CERAMIC FILTER		*
CM8201	CE42599-001	COMB FILTER MOD		*
DL8201	CE42464-001	BPF&DL MODULE		*
J8801	QMCC004-C01	MINI DIN JACK		*
J8802	QNN0083-001	PIN JACK		*
J8803-04	QMS3003-C01	JACK		*
SF8101	CE42589-201	SAW FILTER		*
△ TU8001	CEEM270-A02	TUNER		*
X8701	CE40405-001	CRYSTAL(4FSC)		

**FRONT AV JACK PW BOARD ASS'Y ( SFK0J002A-M2 )**

△ Symbol No.	Part No.	Part Name	Description	Local
O T H E R S				
J0001	CEMN032-004	PIN JACK		

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AV-36870

## REMOTE CONTROL UNIT PARTS LIST

[AV-36850(US&CA)]

[RM-C745-1C]

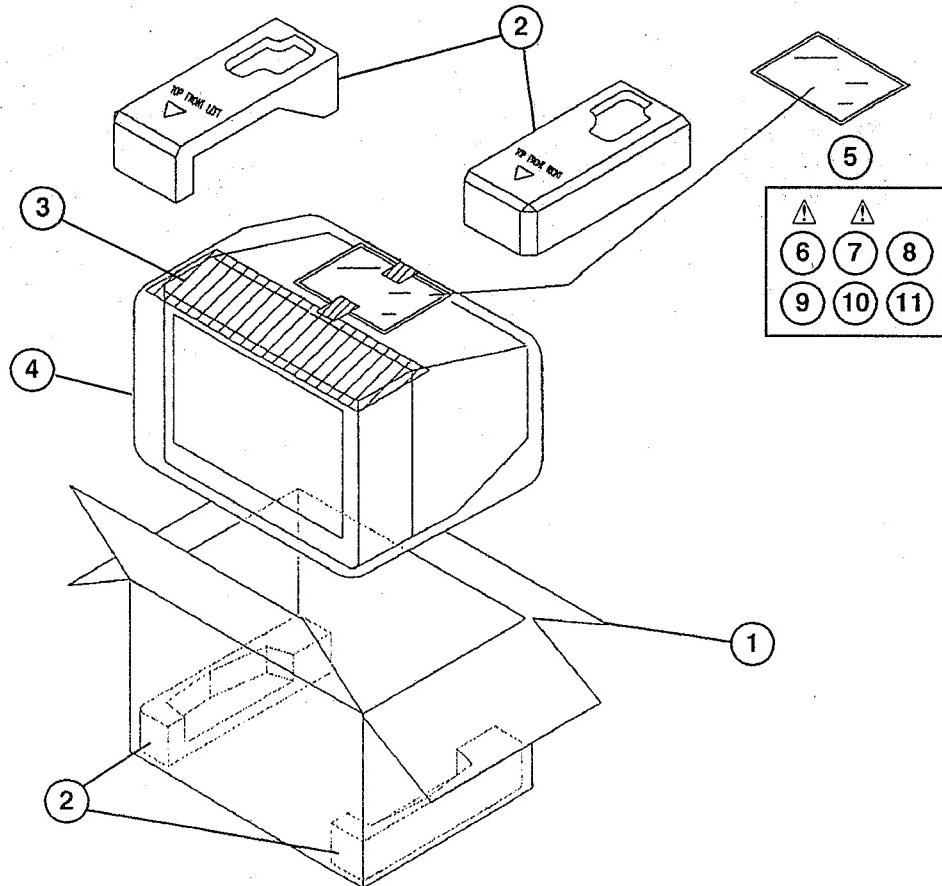
△ Ref.No.	Part No.	Part Name	Description	Local
	2AA015250	BATTERY COVER		*

[AV-36870(US&CA)]

[RM-C885-1A]

△ Ref.No.	Part No.	Part Name	Description	Local
	103RRC-AAA-01R	BATTERY COVER		*

## PACKING



## PACKING PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
<b>[America model]</b>				
1	CP11499-019-A	PACKING CASE		*
2	CP11387-00D-A	CUSHION ASSY	4pcs in 1set	*
3	CP30055-002-A	TOP COVER		*
4	CP30056-004-A	POLY BAG		*
5	QPGA025-03505A	POLY BAG		*
△ 6	CQ40343-001-A	INST BOOK(ENGLISH)	AV-36850	*
△ 6	CQ40334-001-A	INST BOOK(ENGLISH)	AV-36870	*
8	RM-C745-1C	REMOCON UNIT	AV-36850	*
8	RM-C885-1A	REMOCON UNIT	AV-36870	*
9	BT-51006-1Q	REGISTER CARD		*
<b>[Canada model]</b>				
1	CP11499-019-A	PACKING CASE		*
2	CP11387-00D-A	CUSHION ASSY	4pcs in 1set	*
3	CP30055-002-A	TOP COVER		*
4	CP30056-004-A	POLY BAG		*
5	QPGA025-03505A	POLY BAG		*
△ 6	CQ40343-001-A	INST BOOK(ENGLISH)	AV-36850	*
△ 6	CQ40334-001-A	INST BOOK(ENGLISH)	AV-36870	*
△ 7	CQ40344-001-A	INST BOOK(FRENCH)	AV-36850	*
△ 7	CQ40335-001-A	INST BOOK(FRENCH)	AV-36870	*
8	RM-C745-1C	REMOCON UNIT	AV-36850	*
8	RM-C885-1A	REMOCON UNIT	AV-36870	*
10	BT-52002-1Q	WARRANTY CARD		*
11	BT-20071B-Q	SVC CENTER LIST		*